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## THE ANNIVERSARY YEAR

Historic 1966, the first year in the new five-year plan has passed into history. The anniversary year of 1967 has taken its place in the labor watch.

The most notable event of the past year was the 23rd Congress CPSU. It examined and scientifically substantiated the routine tasks and grandiose prospect of the building of a communist society in our country with a Leninist principled and businesslike attitude. The congress worked out the political line of the CPSU for the near future, defined the basic trends of domestic policy and approved the foreign policy course of our party and state aimed at the establishment of more fruitful conditions for the building of communism, the consolidation of the might of the socialist system and comprehensive support for the struggle by the peoples for national and social liberation and peace throughout the world.

The 23rd Congress demonstrated to the entire world the vital force of the ideas of Marxism-Leninism, the cohesion of the communist movement and the irreconcilability of the true revolutionaries toward revisionists and dogmatists whose schismatic activities contradict the interests of the socialist camp and the Marxist-Leninist principles of proletarian internationalism. The decisions of the party congress have absorbed and expressed the innermost thoughts and aspirations of the working people of our multi-national state. They received the general approval of the party and people and the fraternal communist and workers parties.

Our Homeland crowned the year 1966 with remarkable achievements. The fundamental tasks in the development of the national economy were realized successfully. The plan was overfulfilled both in the general production volume and in the majority of the most important types of manufactured goods. According to preliminary calculations, the volume of industrial production increased by 8.4% instead of the 6.7% envisaged in the plan; the country received approximately 100 million tons of steel, over 250 million tons of petroleum and approximately 550 billion kwh of electricity. Goods valued at more than five billion rubles were manufactured above plan.

The greatest grain harvest of all of the years of Soviet rule was gathered last year. An excellent cotton crop was harvested. Uzbekistan alone produced over four million tons of raw cotton which means 29 billion meters of fabric, 440 million kilograms of oil and one million tons of cotton-cake. Purchase plans for all types of animal husbandry products were overfulfilled. The well-being of the working people has been improved, the economic and defense might of the country has been strengthened and the international prestige of our country has been raised significantly.

Loyal to its international duty, the Soviet Union, guided by the Leninist Communist Party, struggles ceaselessly for the consolidation of the friendship and unity of the peoples of all socialist countries. Numerous meetings during the past year, both abroad and in the Soviet Union between the leaders of our party and government and the state and party officials from other countries bear witness to this fact.

The December Plenum of the CPSU which discussed the question, "The International Policy of the USSR and the Struggle by the CPSU for the Cohesion of the Communist Movement," appeared as a result of this important effort. It wholly and fully approved the political line and practical efforts of the Central Committee Politburo, aimed at an implementation of the course in the area of international policy and the world communist movement worked out by the 23rd Party Congress.

Firmly conducting the Leninist course of peaceful coexistence among states with different social systems, the Party and the Soviet government have achieved a further consolidation in the international positions of our state. "The Soviet Union," states the Plenum resolution, "is making a major contribution to the defense of universal peace and the security of peoples and to the cause of the struggle by the working masses for freedom, peace, and social progress."

However, grave obstacles to a normalization of the international situation and a consolidation of peace on earth are being created by the aggressive forces of imperialism, primarily American imperialism, as well as by the revanchist circles of the FRG. In connection with this, the Plenum resolution states: "It is necessary to continue to rebuff firmly the militant forces of imperialism and their policy of interfering in the internal affairs of other countries and unleashing military conflicts."

The Plenum of the CC CPSU fully approved the position of the Politburo and the Soviet government on the Vietnamese question, as well as their line and practical activities in the sphere of mutual relations between the CPSU and the Communist Party of China and between the Soviet Union and the Chinese Peoples Republic. Recent events in China and the decisions of the 11th Plenum of the CC CPC are evidence of the fact that the great power and anti-Soviet policy of Mao Tse Tung and his group have entered a new and dangerous phase. The course which the present leaders of the CPC are conducting on the international arena and their policy in regard to the socialist countries, the hostile campaign against our Party and the Soviet government and the schismatic actions in the international communist movement -- all of these have nothing in common with Marxism-Leninism. Such a policy, if one may so call it, is only aiding the imperialists. It is damaging not only to the interests of socialism and the international workers and national-liberation movement but also to the socialist achievements of the Chinese peoples themselves.

In implementing its firm course toward friendship and international solidarity with the Communist Party of China and the Chinese Peoples Republic, our Party at the same time believes it necessary to expose resolutely the anti-Leninist views and great power nationalistic course of the present Chinese leaders and to strengthen the struggle in defense of Marxist-Leninism and the general line worked out at the Moscow Meetings of 1957 and 1960.

Along with international problems, the Plenum of the CC CPSU has discussed and approved in principle the drafts of the state plan for the development of the USSR national economy and the USSR State Budget for 1967.

The Decisions of the December Plenum CC CPSU (1966) have marked a new and important stage in the confirmation and development of the Leninist style and methods of party work, the turning point for which was the October Plenum of the Central Committee (1964); this is the militant program of work by our party and state in the international sphere. At the same time this is also a program of great effort in the sphere of ideology.

The Second Session of the Supreme Soviet USSR Seventh Convocation was a remarkable event in the life of our country during the past year. The state plan for the development of the USSR national economy for 1967 and the USSR State Budget for 1967 were discussed and approved in an exceedingly businesslike atmosphere and manner.

This year our country will take a new, major step forward in developing the economy and raising the standard of living of the people.

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Thus, for example, it is planned to raise the national income of the country by 6.6%; a growth of 7.3% in the production of industrial goods is planned; and the light and food industry will take a step forward. The rate of growth in the manufacture of consumer goods has significantly approached the rate of growth of the production means. The state plan envisages specific tasks for increasing the production of consumer goods as a result of a better utilization of agricultural and industrial raw materials and the acceleration of the commissioning of production capacities, in particular of capacities for the manufacture of goods where the demand at present is not being fully satisfied.

During this year kolkhozes and sovkhoses must receive from industry 287,000 tractors, 96.5 thousand grain gathering combines and 150,000 trucks. Expenditures have been increased for education, science and culture, health, physical culture and sports, social security and insurance. These amount to 42.9 billion rubles, which is 2.4 billion rubles more than last year. For the maintenance of the Soviet armed forces 14.5 billion rubles have been allocated. The funds allocated will permit the maintenance of the country's defense at the level required at the present time and in this manner will assure the security not only of our beloved Homeland but of all countries of the socialist comity against surprise enroachments by any aggressor.

The laws adopted at the session are aimed at a further increase in the economic potential and defense might of the country and in the material well-being and cultural level of the Soviet people.

This is why it may be stated that the past year will become part of history as a year of major transformations in the political, public and economic life of our country, which were brought forth by the decisions of the 23rd party congress, the subsequent plenums of the CC-CPUS and the decisions of the Second Session of the Supreme Soviet of the Seventh Convocation.

Fighting men of the Soviet Army and Navy, including the rear personnel of all the Armed Forces worked fruitfully in the past year on improving the military mastery and on the further improvement in the level of combat readiness of the chasti and ships.

The problems of material, technical and medical troop support were successfully resolved during almost all exercises and naval cruises and during rocket firing and airforce training flights.

Good results in rear support of troop combat training and in the training and education of subordinates were achieved by officers L. Prisyazhnyuk and A. Dushabayev, and high field skill was shown during exercises by personnel of the motor vehicle podrazdeleniye headed by Capt. V. Zharkov. Fleet rear officers V. Luk'yantsev, A. Udalov, V. Boyarskiy and others are solving their tasks in an exemplary manner. The hospital commanded by Col. Medical Service P. Krivenko has shown good preparation for solving unexpected tasks.

Many enterprises of the Ministry of Defense USSR fulfilled their annual production-finance plans ahead of schedule. Among these agencies are those headed by A. Shcherbin, F. Lukashenko, A. Samokhvalov and others. The Main Directorate for Trade of the Ministry of Defense has overfulfilled the commodity turnover plan.

Military construction detachments achieved great results in 1966. Many military construction detachments, working on the removal of the aftermath of the earthquakes in Tashkent, achieved particularly significant results. The names of the best builders of Sergeli, the Tashkent satellite, are wellknown: company commander, Major V. Gostev, work superintendent Lt. V. Rakushin, work bridge leader Sr. Sgt. V. Pleshaunis, Pvt. A. Neyshan and others. In Sergeli our military builders



executed a great feat, building this splendid city within a brief period of time.

However, we do not have the right to be content with the successes achieved during the past training year and to rest on our laurels. The order of the time is to move on tirelessly and to strive for the best results. Military science is not stagnant; it is being developed and improved continuously and the latest equipment replaces new equipment. Troop rear support is also growing more complex. This is why the members of the army and navy, including rear personnel, will have to strive for new heights in combat and special training and for best indices in the material, technical and medical supply of forces.

Entering 1967, the Soviet people are preparing with a great surge of creative energy solemnly to mark the anniversary of their state with new successes in labor and in the development of economy and culture.

V. I. Lenin taught that the best method for celebrating the October anniversary is to concentrate attention on unsolved tasks. It is no secret that industrial reserves are still being insufficiently mobilized in certain branches of the national economy. Some plants and factories are not meeting the tasks for production volume, growth of labor productivity, reduction of prime cost and improvement in production quality.

Welcoming the fiftieth anniversary of the Great October, thousands of production collectives, undertaking specific socialist obligations, are persistently struggling to implement the Decisions of the 23rd Congress of the CPSU.

In 1967 our industry is faced with taking a new step in implementing economic reform. Entire branches of industry will approach their work in the new manner. The role of economic methods in the management of the national economy will grow and material incentives of enterprises will increase. The further step of the economic reform will make our national economy even mightier.

Agriculture still faces many unresolved tasks. Relying on the Decisions of the March (1965) and May (1966) Plenums of the CC CPSU, agricultural workers are directing their efforts toward further increasing the harvest, raising productivity of animal husbandry and reducing the prime cost thereof. The struggle for a large anniversary crop of all agricultural products is beginning.

The party and government are devoting much attention to the extensive introduction into the national economy during the current year of the latest achievements of science and technology, progressive technology, progressive technology, mechanization and automation of production processes and automation of control systems with the use of computers for an overall increase in economic efficiency of public production and an acceleration in the mastering of commissioned production capacities; for an improvement in quality indicators of materials and equipment manufactured by industry; for a substantial increase in the production of agricultural products in particular grain and primarily as a result of increasing the harvest of all agricultural crops, the further increase in production of meat, milk, wool and eggs and the rational utilization of farm machinery and mineral fertilizers; for improving capital construction matters, the thrifty expenditure of raw materials and other materials, fuel and electric power; and for a further increase in labor productivity, the extensive introduction of the scientific organization of labor and many other questions which will aid in better satisfying the tasks set before the national economy of the USSR in the current year.

The valiant Armed Forces stand vigilantly guarding the peaceful and creative labor of the Soviet people building communism. They keep

a vigilant watch over the intrigues of the imperialists hatching plans for a new, thermonuclear world war. The growing military danger brought forth by the aggressive actions of the imperialists, and above all the USA which is expanding the criminal war against the South Vietnamese patriots and escalating the aggression against the DRV, is evidence of this. Neo-nazism is once again rearing its head in West Germany.

Guarding peace, the personnel of the armed forces are ready at any moment to defend their beloved Homeland and the entire socialist camp.

Members of the Army and Navy together with the Soviet people are also preparing a worthy welcome for the 50th anniversary of the Great October and the Soviet Armed Forces. Having begun the training year in an organized manner, they are exerting maximum efforts to rise to a new and higher degree of military mastery. First class combat equipment is being mastered and military discipline and organization are being strengthened.

The personnel of the rear chasti and installations who must not only study persistently but also supply troops with all necessary materials on a day to day basis have in particular a great many problems.

Constant combat readiness, excellent training, a firm military and labor discipline and systematic and timely material, technical and medical support of the troops will be the best gift of the rear troops for these anniversary events.

Many rear chasti and podrazdeleniya, warehouses and bases, medical establishments and trade and welfare enterprises, shops and military construction detachments have undertaken increased socialist obligations. It is a matter of honor for the rear-personnel to meet these on time and with high quality. The commanders and chiefs, the political organs, the party and the Komsomol organizations are called upon to support in every way this massive patriotic upsurge of the troops and to direct it toward a worthy greeting for the all-national holiday -- the 50th anniversary of the Great October Socialist Revolution and the Soviet state.

Little time remains before this portentous date. The Soviet people and Armed Forces, inspired by the ideas of Lenin and solving important and responsible tasks in 1967, are firmly marching toward the radiant heights of communism.

## REAR DEVELOPMENT IN THE POSTWAR PERIOD

Marshal Soviet Union  
I. Bagramyan

More than twenty years have passed since the last salvos of the Second World War were heard. Under the leadership of the Communist Party, the Soviet people and their Armed Forces carried out exploits unheard of in the annals of history, and, with the cooperation of the peoples of other countries, were victorious over Hitlerite Germany and militaristic Japan. The decisive role in the victorious conclusion of the Second World War belongs to the Soviet Union which bore the brunt of the ferocious struggle with fascist Germany and its allies.

The great historic victory gained by the Soviet people was the lawful result of the strength and vitality of the socialist social and state structure, of its great advantages over the dying capitalist system.

After the end of the war, the workers of our country, under the leadership of the Party, directed all of their efforts toward the restoration and further development of the national economy. The initial postwar years were very difficult. As we all know, the common loss suffered by the national economy of the Soviet Union during the war years, together with the military expenditures and the loss of income from industry and agriculture in the areas temporarily occupied by the German-fascist troops was 2 trillion 269 billion rubles. We lost over 20 million Soviet people. Great areas lying to the west of the Volga were transformed into the ruins of thousands of cities and villages, tons of thousands of plants and other industrial enterprises, kolchozes and sovkhoses, schools and habitations. It would seem that decades would be needed to restore all of them. But the Soviet people applied all of their efforts to restore the national economy within a short period of time.

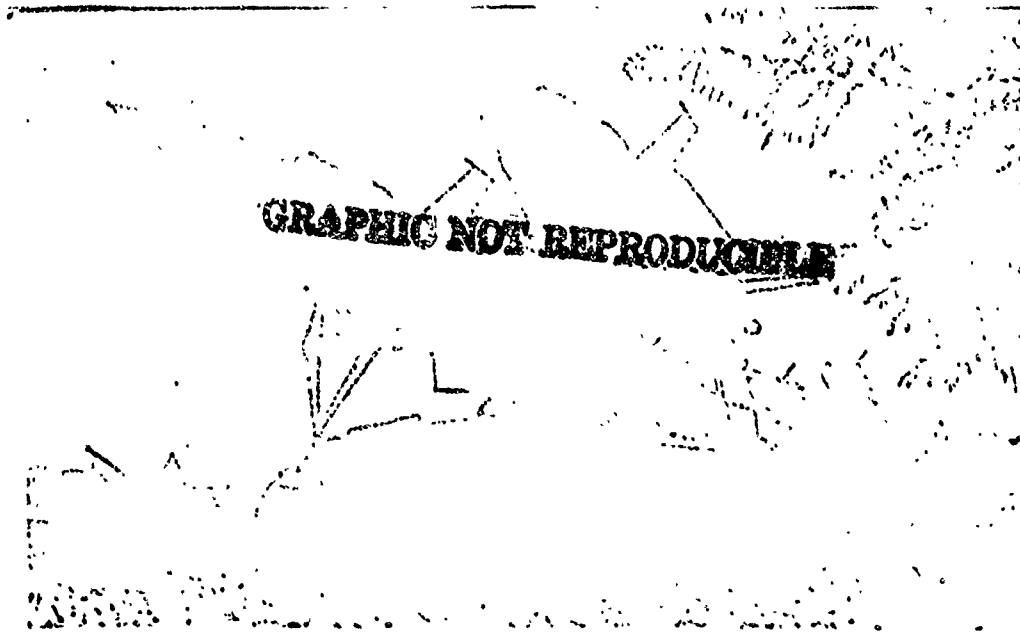
In the Accounting report of the CC CPSU to the 23rd Party Congress, comrade L. I. Brezhnev mentioned that by 1965, we produced 5 times more steel than in 1940, nearly 5.5 times more bar stock, slightly less than 8 times more petroleum, nearly 13 times as much cement, 4.2 as many motor vehicles, slightly more than 11 times as many tractors, and 10.5 times as much electric power.

The following fact attests to the rapid development of the national economy in recent years. More than 40 years, 32 years if we exclude the war years, were required to create the economic and defense potential with which our state entered the seven-year plan (1959-1965). During this same seven years, the basic material fund of the country nearly doubled.

The historic decisions of the 23rd Congress CPSU, the new five-year plan for developing the national economy of the USSR in 1966-1970 approved by the Party and the state, inspires hope that the main task of creating a material-technical base of communism in our country will successfully be carried out. As a result of its solution, the economy of our state will rise to a new height. This means that the Soviet Armed Forces will have the possibility for further development and its power will grow even more.

Further improvement in the Armed Forces rear is also unalterably tied in with the economic possibilities of the country and the general development of military affairs. The rear was particularly developed during the Great Patriotic War, but its development also continued on into the postwar period. True, the mission of the rear changed somewhat for peacetime -- much work had to be accomplished in creating and supporting

favorable material and welfare activities for the life and combat training of the troops. Along with this, one of the fundamental tasks was the further development and perfection of the rear to support a high combat readiness of the Armed Forces. This was demanded by the international situation, because with the end of the Second World War, the imperialist circles immediately began to prepare for a new war.



The rocket launchers move out to the launch position area

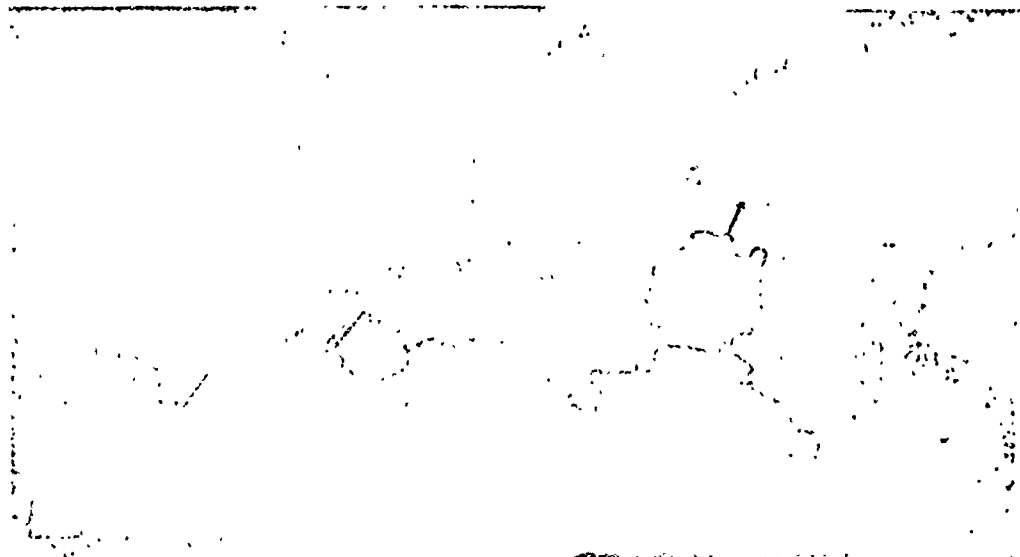
The full mechanization and motorization of the Armed Forces, and its equipping with nuclear rocket weapons in particular, had a tremendous effect on rear development in the postwar period. This brought about basic qualitative changes in the organizational structure of the troops and in the methods of conducting battles, operations, and war as a whole.

The development of the Armed Forces and its rear progressed slowly, by stages. Initially, when the army and navy first received nuclear arms, the Armed Forces and its rear developed primarily through its becoming equipped with more modern forms of conventional arms and equipment.

Having rich experience in conducting major operations during the Great Patriotic War, the Soviet Armed Forces continued to improve this know-how, its perfection and military art in the conduct of combat operations under conditions of the enemy's possible employment of weapons of mass destruction. At the same time, as the troops were receiving the latest types of arms and equipment possessing even higher combat qualities, new methods had to be found for conducting operations and for their rear support. Thus, for instance, the emergence of powerful mechanized *chasti* and *soyedineniya*, the increased air force operating range has permitted a sharp increase in the offensive tempos and in scope of operations as a whole. This demanded a further increase in the mobility and maneuverability of not only the troop but also the operational rear.

For this purpose, there was an improvement in the technical equipping and structure of all rear elements, the development of more mobile rear *chasti* and installations, and there has been a noticeable increase in the technical and productive capabilities of the railroad, road, and repair *chasti* and installations. All of this was done in the interests

of uninterrupted rear support of the troops under maneuvering and dynamic conditions of conducting combat operations. It became clear that with the full mechanization and motorization of the troops, the organization of their support cannot be built on the experiences of the Great Patriotic War alone. A fundamentally new approach to the solution of a number of rear tasks was required. This became especially evident when the troops were armed with nuclear rocket arms.



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#### Fueling tanks on the march

With the equipping of the army and navy with nuclear rocket arms, a new stage arrived in the building of our Armed Forces. Its new branch is developing -- the Strategic Rocket Troops. The ground troops are gradually being equipped with operational and tactical rockets. The Air Force is receiving further development. In essence, the Air Defense Troops have been virtually reformed and antiaircraft missiles are now their primary means. The Navy is becoming more powerful, an oceanic navy.

All of this brings about a fundamental change in our views of conducting operations and war as a whole. The questions of concentrating the basic forces and the deployment of the troop groupings for offensive operations on ground theaters of military operations have to be posed anew. The nuclear rocket arms have the main role in achieving the goals of the operations. Thus, the primary question becomes the constant combat readiness of our Armed Forces capable of making maximum use, for the rapid and complete defeat of the enemy, of the results of nuclear rocket strikes delivered by our Strategic Rocket Troops and by other branches of the Armed Forces. Now, there is a new and extremely serious problem arises for all branches of the Armed Forces -- defense and survival under conditions of the enemy's employment of weapons of mass destruction.

It is fully understandable that all of these problems and the new tasks could not help but have an effect on the condition and development of all rear elements. First of all, it was necessary to have a basic improvement in the technical equipping and to raise the capabilities of the rear in the restoration of communications, in uninterrupted supply, in the repair of inoperative arms and equipment, and in medical support for the troops. Much theoretical and practical research was carried out in the solution of these problems. The conduct of test

exercises and research activities permitted a basic reorganization of the rear.

Rocket cutters out on cruise

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СВЯННІС ІОЛ НЕМОНДСВІТ

A specialized technical rear was created for the Strategic Rocket Troops. The Ground Troops rear was improved. It became highly mobile. The motor vehicle troops have received vehicles with high roadability, and the railroad and highway troops began to specialize in the restoration of mass destruction along the lines of communications. Chemical and engineer podrazdeleniya began to appear in the composition of the rear for its protection.

The Air Defense Troops rear received a further development. This probably is the most complex rear structure and its creation required



the use of hundreds of various types of motor vehicles and a large number of specialized rear podrazdeleniya. The Air Defense Troops rear agencies are faced with a very responsible task -- to provide the anti-air-rocket, air, and radiotechnical chasty with all necessary materiel to support their constant combat readiness to repel any possible air attack at any time of day or night.

The task of the Air Forces rear in aviation technical and airfield maintenance service under conditions of the wide dispersal of aircraft basing has sharply increased. This is understandable. Not too long ago, the airfield technical maintenance and service of flights was not a complex matter. Not more than 10-15 types of relatively simply designed vehicles and devices were needed to ready the aircraft for flights. The maintenance of airfields, mostly dirt fields with a limited amount of artificial covering, did not create any great problems. The rocket carrying and supersonic aviation has introduced a new content into the airfield technical maintenance and service of flights. The technical servicing of the aircraft park has become more complex; there has been a significant increase in the demands on fuel, electric power, and various gasses, and the requirements on airfield size and maintenance have been increased. The air force rear is faced with completely new tasks. It is fully understandable that it was not possible to solve them without a full technical rearming of the air force rear.

Means had to be developed for the Navy which would allow it to provide thorough support for its forces under any condition of combat operations. In addition to rearming the rear so that technical maintenance and service could be provided the new types of combatant ships and rocket arms, it was also necessary to have special means to carry out these activities while situated far from the primary bases. To do this, powerful movable power sources and transportable repair and other technical facilities had to be created.

Organizational and work improvement of the rear of all branches of the Armed Forces was linked with the necessity for a further development and specialization of the various rear support services and with the development of new technical and material means.

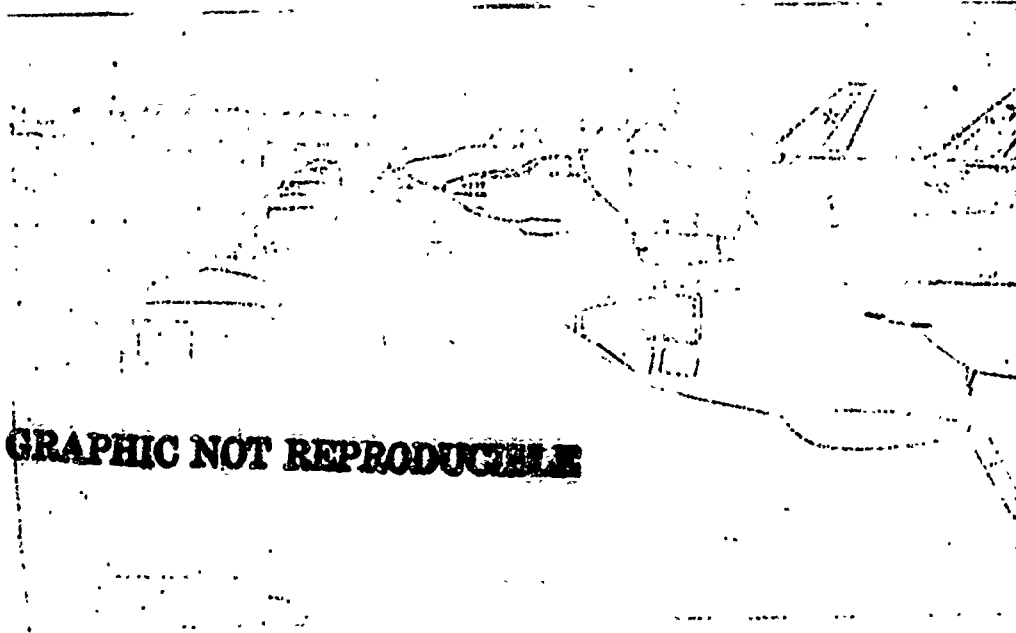
The rocket-artillery, armored, motor-tractor and other engineer-technical services received further development in the sphere of the designing and introduction of the latest models of armament and equipment, in their maximum standardization, and in the creation of more productive means of servicing them. This work is extremely important even now, as the work of the mentioned services indicates that their role and significance in the further development of the means of combat and rear support is increasing even more.

There has been a qualitative change in the fuel supply service. Now it has improved technical means for the delivery of various types of fuel, the transportation of fuel through pipelines, containers for the storage and shipment of large quantities of fuel, units and apparatus for the generation of fuels and lubricants, the technical facilities for group fueling of combat and transport vehicles during the course of battle, of aircraft on the ground and in the air, and of ships out at sea. All of this allows our troops to conduct combat operations for a considerable period of time without refueling or to accomplish it in compressed time periods, to execute marches over great distances and at higher tempos than this was possible during the last war.

The food and rations service continued to work toward the development of technical means of food preparation and the creation of new food rations for personnel operating under particularly difficult conditions and primarily for the servicemen in the rocket chasty and in the air and submarine forces.

The clothing supply service continued its work in improving the quality of military and protective clothing.

The medical service developed primarily in the field of improving the means of the diagnosis and treatment of the sick and wounded from the mass destruction caused by new types of arms and also in the solution of the problems of habitability and improving the physical training of the troops.



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#### At the airfield

The military transportation service, and its closely associated railroad and highway troops, possesses the means for the rapid restoration and maintenance of lines of communication and the movement of troops and their material support under conditions of mass destruction along the lines of communication.

All of this states that now the rear services are no longer the supplying services which, in the past, received various items of supply from industry and issued them to the troops. Now the rear services themselves are the producers of many types of technical and material means, are the direct support services of battles and operations.

It is fully understandable that the development of the rear services and the successful solution of the tasks facing them during the postwar period were also tied in with the need for training highly specialized rear specialists. Cadres were needed capable of making timely and correct evaluations of changes taking place in military affairs. All of the necessary conditions were established for the training of such cadres. The rear services took in many young highly educated specialists in the field of material, technical, and medical troop support. Now there is no rear agency which does not have an officer with a higher or secondary special education. Attaching great significance to the strengthening of the Armed Forces rear, our Party and the Soviet Government took timely measures to ensure that commanding roles in the rear agencies were filled by experienced generals, admirals, and officers possessing a great operational outlook and practical experience in the command of troop chastis and soyedineniya. This combination of combined-arms and specialized cadres in rear activity fully justified itself.

The process of the development of the Armed Forces and its rear

is not standing still. Further improvement in the rear takes place in accordance with the tasks being solved.

The rapid development of arms and equipment and the introduction of new means of preparing for and conducting combat operations has resulted in the expansion of the volume of rear work to tremendous size. It is sufficient to say that the nomenclature of material means which have to be produced by industry and delivered to the troops is counted in the tens and hundreds of thousands of items. More than a single hundred kilogram weight of material means has to be delivered to support just one soldier for one day of combat. One can well imagine how much materiel will have to be brought up to a theater of military operations in the event the imperialists would unleash a new war.

This means that in order to establish favorable conditions for the uninterrupted rear support of the Armed Forces during wartime, it is necessary to prepare on an even greater scale the area of the probable theaters of military operations and of the entire country in the rear sense.

There must also be a further improvement in the organizational structure of the rear agencies at all levels, strive for a maximum but sensible centralization of all forms and means of rear support, make our troop and operational rear even more flexible and controllable. It would be expedient to simplify the system of supply, repair, and medical support in order to eliminate parallelism completely and to raise sharply the work effectiveness of all levels of the rear.

In other words, it is important to continue improving our troop and operational rear in all branches of the Armed Forces, to make it even more autonomous and combat capable because in a future war, should it arise, we cannot rely on the classic method of organizing supply, repair, and medical support used during the past war. At that time it was possible to build the work by means of the consecutive build up of forces. Time was available for this -- the operational pauses between operations. Now these pauses cannot exist, and rear support will have to be built without interruption, with maximum intensity and means at each element of the rear.

In this connection, an extremely important significance is assumed by the question of the economy and effectiveness of employing the forces and means of the rear. This also is understandable. They will not always be in sufficiency, mainly because of the limited amount of such forces and means at the troop level and their incomplete delivery from the deep rear, and also because of the possible great losses in materiel, rear chasti and installations from the effect of weapons of mass destruction. All of this requires a thorough foresight of the character of conducting combat operations, the ability to properly disperse the forces and means of the rear, the establishment of reserve stocks, and the constant knowledge of the local situations so that a timely maneuvering could be made with the materiel reserves, and the rear chasti and installations.

Can these tasks be successfully solved in the operations of a future war? Yes they can. We have all of the necessary material resources to do this. The successful fulfillment of the new five-year plan (1966-1970) will strengthen even more the defensive might of our country.

By 1970 the carrying and traffic capacity of the railroads will increase significantly. Motor vehicle roads with hard surfaces, with a length of nearly 63,000 kilometers, will be built during the new five-year plan. It is anticipated that by 1970, 1360-1510 thousand motor vehicles will be manufactured. With this there will be a sharp increase in the production of high roadability vehicles. As these are put into

service in the motor transport chasti, the capabilities of the latter will be increased by 40-60%. Much work is planned to be carried out in the expansion of maritime and river transportation. Air shipments will take on a mass character. There will be a significant increase in the productive capabilities of the country for the production of various medical, engineer, and building equipment. The fulfillment of the plans on the expansion of the petroleum and light industry and agriculture will also have a favorable effect on improving the supplying of troops with all types of fuel, food, and clothing.

All of this forms that necessary material-technical base which will facilitate a further development in the methods and means of troop rear support.



Computer equipment has solidly entered into the routine work of the rear control elements. In the photograph: Engineer Captain R. Baranov and operator H. Korobetskiikh control the tabulated graph summary.

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GRAPHIC NOT REPRODUCIBLE

## THE FIRST YEARS OF THE MILITARY ACADEMY

Doc , candidate of military sciences, Colonel  
A. Taralov

In a letter to the editors of the journal, officers M. Ursul, A. Syzko, and V. Gomelauri requested to hear how and when the Military Logistics Academy /Voyenno-khozyaystvennaya akademiya/ the forerunner of the present Military Academy of Rear and Transportation Services, was formed. They are also interested in how the training of rear cadres for the young Red Army was organized during the period of the civil war and the foreign military intervention. In carrying out the wishes of the readers, we requested docent, candidate of military sciences, Colonel A. Taralov to answer these questions.

Immediately following the victory of the Great October, our Party was faced with the problem of training cadres for the world's first army of a socialist state. The young Red Army needed cadres unswervingly loyal to Soviet authority, ready to rise to the defense of the conquests of the revolution. They were also needed to organize the uninterrupted material support of the army and navy under the heavy conditions of destruction.

The Soviet military quartermaster had to know military affairs, economics, military supply work, and how to make the correct economically sound and firm decisions. He had to understand the great responsibility facing the workers and the country for a thrifty and economic expenditure of material goods which in truth were now the property of the people, how to uproot mismanagement, and to establish the correct relationships with the local population and in so doing to take into account the policies of the Party and the class composition of the population.

The foreign imperialists and the internal counterrevolutionaries engaged the Soviets in battle, assuming that the Communist Party and the young Soviet state would not be able to ready these cadres in such a short period of time. But our Party sent its best representatives to build up the state apparatus, the directorates of the enterprises and institutions, the leadership of the economic life of the country, and for the establishment of the armed forces and their rear agencies. Soldiers and sailors, and the leading workers and peasants, faithful to the Soviet state, were placed into the military logistics assignments. Also, Lenin and the Party boldly took the course of using the old military specialists for the building of the Soviet Armed Forces and kept their activity under tight party control. The "military specialists", the men from the tsarist army, were also brought into the supply and service activities of the Red Army. Beginning with 1900, they were taught at the Quartermaster course (school) for the training of quartermaster department officers. In 1911 this course was reorganized into the Quartermaster Academy which annually graduated up to 50 officers with a higher special military education -- military technological engineers.

It stands to reason that it was not the old military specialists who were called upon to play the decisive role in the formation and strengthening of the Red Army. On the initiative of V. I. Lenin, the Party set the problem of forcing training of Red Army rear specialists from among the workers and peasants. An important role in the solution of this task belonged to the Quartermaster Academy /Intendantskaya Akademiya/ subsequently renamed the Military Logistics Academy.

At one time, many believed that the Military Logistics Academy

began to ready the cadres only by the end of 1918. By the way, that is why the day of the formation of the Military Academy of the Rear and Transportation Services is celebrated in September. The study of archive materials and other documents makes it possible for us to open more fully the role of the Military Logistics Academy in the training of the cadres and to clarify individual facts concerning its formation and activity during the years of the foreign military intervention and the civil war. Here are some of them.

The veterans of the Quartermaster Academy recall how in December 1917 its personnel elected delegates who visited V. I. Lenin in Smol'nyy and announced that the academy's collective greeted the victory of the socialist revolution and was ready to serve Soviet rule.

On 15 (28) January 1918, by decree of the Soviet Government signed by V. I. Lenin, there was formed the All-Russian Board on the Formation of the Red Army. The board included a supply section on whose direction the agencies and installations were formed for supervising rear support of the Red Army. On 12 March 1918, the People's Commissariat for Military Affairs sent to the supply section, which by this time had been reformed into the Military Logistics Committee */Voyenno-khozyaystvennyy komitet/* of the Workers and Peasants Red Army */RKKA/*, the report of the Chief Quartermaster, dated 2 (15) February, on the Quartermaster Academy and requested the committee to present its concepts on the future fate of the academy: "Should it be retained within the military establishment or should it be given to someone else, for example to the Supreme Council of National Economy." */Note: TsGASA, f.1, op.1, d.197, p.2./* On 15 March 1918, the Military Logistics Committee RKKA made the decision to leave the academy as a higher military education institution and to reorganize it on a new beginning. */Note: op. cit. 1.1./*

In connection with the disbanding of the Main Quartermaster Directorate and the transfer of its functions to the Military Logistics Committee */Note: Order of the People's Commissariat for Military Affairs No. 202, dated 13 March 1918/*, the academy also was subordinated to the committee and became known as the Military Logistics Academy. The decision was made that it would have a 4-month expedited course in training rear specialists. However, with the evacuation of the academy from Petrograd to Moscow, it was decided to open these courses in Moscow */Note: TsGASA, f.1, op.1, d.197, 1.1/*. The People's Commissariat for Military Affairs approved the decision of the Military Logistics Committee and the program of courses. Military technological engineer P. V. Yakubinskiy was designated chief of the academy. In March, the Military Logistics Academy moved to Moscow.

In 1923, one of its veterans wrote in the magazine *Red Academy*: "The history of the academy begins long before the order of the RVSM dated 16 October 1920, on the organization of the normal (three year) course. After the October Revolution, in the beginning of 1918, the Quartermaster Academy is moved from Petrograd to Moscow, and here... beginning on 5 April 1918, studies are organized on the accelerated 4-month military logistics courses. On 9 December 1918, studies are opened on the first accelerated 8-month course for supply personnel in the building of the higher women's courses in Devich'ye Pole." */Note: Journal Red Academy, 1923/*.

The accelerated courses trained supply chiefs for brigades and divisions, heads of regimental supplies, and other rear specialists. Furthermore, the academy trained military receivers for work at the industrial enterprises, specialists for the People's Commissariat of Food and Rations, economists, and finance workers. The Commission for the Control of Military Training Institutions of the Red Army, examining it in July 1920, made the conclusion that the "academy is on the right path and will undoubtedly provide the Red Army with useful workers." */Note: TsGASA, f.62, op.1, d.1050, 1.61/*.



A great role in the attainment of the initial success of this training institution was played by the party organization which, at that time, was called the party collective, and actively brought to life the instructions of the Party's Central Committee. On the 25th Anniversary of the Communist Party, the auditors and employees petitioned the RCP(b), in which the following was stated:

"We, the non-Party auditors and employees of the Military Logistics Academy of the Workers and Peasants Red Army and Navy greet the Russian Communist Party on its 25th Anniversary.

"We greet the Party, which for a quarter century has selflessly guided the revolutionary struggle of the Russian proletariat and at the cost of its countless sacrifices brought it victory over tsarism and the bourgeoisie.

"On this great day of celebration, we, the non-Party auditors and employees of the Military Logistics Academy, express our readiness to give our lives on the altar of the revolution under the banner of the Russian Communist Party.

"Our standard bearers in this struggle for the ideals of the workers here inside the walls of the Military Logistics Academy were, are, and will be the collective of the Russian Communist Party welding us, the non-Party ones, into a single thought and goal with the party members into a single working family." /Note: Journal Red Academy, 1923/.

In October 1920, the academy was combined with the Higher Naval Finance-Supply School and became known as the Military Logistics Academy of the RKKA and Navy. /Note: Order of the RVSR No. 2126 dated 16 October 1920/. It had three faculties: military supply, military technical, and military economic. A three year study course was instituted.

From April 1918 to May 1921, the academy set six accelerated graduations and trained 947 military supply specialists for the Red Army. Moreover, during this period it graduated several hundred military receivers, finance personnel, economists, and other specialists for the various civilian organizations.

In this way, new cadres of military supply personnel annually poured into the ranks of the Red Army. Simultaneously with this, and following the instructions of V. I. Lenin, the Party used specialists who had finished the Quartermaster Academy of the old army for military supply work. On the suggestion of V. I. Lenin, the Main Directorate of Logistics of the Red Army was authorized to call up rear specialists from any jobs they were holding in the Soviet institutions. This is confirmed by the following decree of the Defense Council of the Republic:

"1. In view of the lack of former officers and former military officials who have completed the Quartermaster (Military Logistics) Academy, and of the needs in them, to authorize the Main Logistics Directorate to call up, as required, former officers and former officials who have completed the mentioned academy, regardless of the service in which they are serving, without regard to any norms established by decrees and resolutions.

"2. All former officers and former military officials who have finished the Quartermaster (Military Logistics) Academy found to be acceptable for field service or staff duty, must be ready within a five day after receipt of the summons to be ready to leave for their new place of assignment.

Chairman of the Defense Council  
V. Ul'yanov (Lenin)

Secretary of the Defense Council  
L. Fotiyeva."

(Note: Newspaper News of the People's Commissariat for Military Affairs,  
No. 49, 7 March 1919/.

During the difficult years of the foreign military intervention and the civil war, many of the graduates of the former Quartermaster and accelerated courses of the Military Logistics Academy were entrusted by the Communist Party and the Soviet Government with the important mission of organizing the work of the industrial enterprises, of rendering assistance to the national economy, and the leadership of the central institutions. The majority of graduates of the accelerated courses who were put into the active army successfully solved the problems of troop supply under the most complex combat conditions. Many of them died a hero's death in the battles against the interventionists and the white guards.

The Military Logistics Academy, the forerunner of the Military Academy of Rear and Transportation Services, successfully fulfilled the task set before it by the Communist Party and made its contribution into the matter of defeating the foreign interventionists and the internal counterrevolutionaries.

THE FRIENDSHIP OF PEOPLES IS  
THE GUARANTEE OF THE MIGHT OF THE HOMELAND

Candidate of Philosophical Sci.  
Lt. Col. Ye. Vasil'yev  
Candidate of Historical Sci.  
Lt. Col. N. Terlikov

One of the historical achievements of the Great October Socialist Revolution was the firm and inviolable friendship of the peoples of the USSR. The economic foundation of the nations and peoples inhabiting our country is composed of the socialist method of production and the political foundation is the socialist and public-political system guaranteeing equality for all nations and peoples. The Marxist-Leninist ideology which rules in our country binds friendship between peoples and opens the broadest expanse for the development of their cultures.

Even prior to the victory of the Great October, V. I. Lenin worked out a specific program for resolving the national questions and presented methods for the rapprochement and the flourishing of nations. He presents fundamental tenets of this program in the works, Critical Notes on the National Question and The Right of Nations to Self-Determination. Complete democratization of public life on the basis of socialism, the establishment of true equality among all races and nations, the granting to nations of the right of self-determination up to and including secession and the international cohesion of the workers class of all of the country's nationalities are the chief essence of the Leninist national policy which is being steadfastly implemented by our communist party. The most important state act which laid the foundation for the fulfillment of the Leninist program was the declaration of the rights of Russian peoples adopted by the Soviet government on 15 November 1917. This historical document proclaimed the equality and sovereignty of all peoples of our country, their unlimited right to self-determination up to secession and the establishment of independent statehood, the abolishment of all national privileges and restrictions and free development of national minorities and ethnographic groups. Adoption of the declaration established the legal and political equality of the numerous nations and peoples of our country.

Important measures were implemented on the broadening, cohesion and strengthening of the friendship of peoples during the first years of Soviet rule on the initiative of V. I. Lenin. One of these was the establishment in December, 1922, of the Union of Soviet Socialist Republics, the first multi-national state in the world founded on national equality and on a voluntary basis. "We desire," wrote V. I. Lenin, "as large a state as possible, as close an alliance as possible and as many nations as possible living as neighbors with the Great Russians; we desire this in the interests of democracy and socialism and in the interests of drawing to the struggle of the proletariat as many working peoples of various nations as possible."

The establishment of the Soviet Union strengthened the economic and military might of the Soviet republics, consolidated their political situation and created the necessary prerequisite for the further rapprochement of the people and for their common struggle for socialism.

Industrialization of the country, collectivization of agriculture and the cultural revolution made it possible to overcome the economic and cultural backwardness of the peoples of the Soviet Union and to develop, draw together and mutually enrich their cultures.

The victory of socialism in the USSR led to an unprecedented moral and political unity of the Soviet nations and the inception of new relations between them--relations of fraternal cooperation and mutual assistance. The friendship of the peoples of the USSR has been converted

into one of the decisive, moving forces of social development and a mighty factor in social progress. The Great Patriotic War was a severe test of the firmness of the friendship of the peoples of the USSR. It showed the great firmness of the state, public and economic system of the Soviet Union and the firmness of the new type of mutual ties and mutual relations among the peoples of our country. Thanks to the organizational work of the party and the labor efforts of the multinational Soviet people our country was, within a brief period of time, transformed into a single military camp. The Soviet people under the most difficult wartime conditions were able to supply their army with everything necessary to route the enemy.

On the battlefields and in partisan detachments the sons and daughters of all the nations and peoples of the Soviet Union fought as one against the enemy. The names of fearless fighters -- the son of the Russian people, political instructor Vasilii Klochkov; the air ace, Ukrainian Ivan Kozhedub; the Azerbaydzhani Ali Guseynov; the Tatar Bayful Gilyazetdinov; the Turkman Kurban Durdy; the Estonian Arnol'd Meri; the Armenian Samvel Matevosyan and many others -- are well-known to our people. Over 350 persons duplicated the immortal feat of Alikssandr Matrosov, covering the gun ports of enemy pillboxes and bunkers with their bodies. Among these there are fighters from almost all nationalities: the Ukrainians A. Shevchenko and K. Prokol'chuk, the Uzbek T. Erdzhigitov, the Estonian I. Laar, the Kirgiz Ch. Tuleberdiyev and others.

During the post war years all the peoples of our country, guided by the communist party, reconstructed the national economy with a tremendous upsurge and created the conditions for its further development.

At present our country is successfully implementing the program of the expanded building of communism. The Soviet people are conducting the building of communism on the basis of the Program of the CPSU which is the communist manifesto of our times. In resolving the threefold task -- the creation of a material and technical base of communism, the formation of communist social attitudes and the rearing of a new man -- our people building a society which will deliver all mankind from social inequality and all forms of oppression and exploitation. "The expanded communist construction," points out the Program of the CPSU, "marks a new stage in the development of national relations in the USSR characterized by a further cohesion of the nations and their achievement of complete unity."

In implementing this program requirement of the party, we are following the instructions of V. I. Lenin who stressed the necessity of a comprehensive consideration of the peculiarities and needs of each nation and who also demanded a struggle against petty national narrow-mindedness, reticence and isolationism and taught that the entire and universal matter must be considered, subordinating the individual interests to the common interests. Only this kind of policy will lead to the further cohesion of all peoples of the Soviet Union, to an expansion and extension of the economic, political and cultural ties among them and to a comprehensive rapprochement of nations on the basis of the complete community of economic, political and spiritual interests and fraternal friendship and cooperation.

The best example in our day of Leninist policy is the economic reform worked out by the party at the September 1965 Plenum of the CC CPSU and this marks the further perfection of the guidance of the national economy. As the facts show, the implementation of the new economic policy of the party, the branch management principle; the developments of democratic initiative in management; and the correct utilization of the mechanism of economic laws permit an expansion and improvement in the best manner of inter-republic ties and a careful consideration of the peculiarities and needs of each nation, exclude manifestations of parochialism and assure acceleration in the development of socialist production.

All Soviet nations and peoples welcomed with great interest the new Five-Year Plan for the development of the national economy during 1966-1970. The peoples of the Soviet Union, actively joining the work for the fulfillment of the Five-Year Plan, have demonstrated their profound interest, monolithic nature, unity and a feeling of great responsibility for the fate of their homeland.

GRAPHIC NOT REPRODUCIBLE

Many people visit the chaste club during the evening. Interesting projects are carried out here. Many of these are dedicated to the portentous date of the 50th anniversary of the Great October Socialist Revolution. Today the airmen play host to Aleksandr Mikhaylovich Kanyukov, a deputy from the local council of workers deputies. He described how this anniversary is being met by the workers in the towns and villages, how they meet the plans for the national economy and the growth of the material well-being and cultural level of the population. The discussion between the soldiers and their deputy continued long after the conclusion of the official meeting.

However, the friendship of nations is manifested not only in their correct understanding of nationwide and national tasks; it is concretely embodied in the combined active labor for multiplication of the material and spiritual riches of the Soviet Homeland. National egoism and national isolationism as well as parasitism and a consumer attitude are foreign to socialist ideology. It has placed high demands on each worker in the multi-national Soviet family who uses its plentiful yield to make his contribution to the common cause of the building of communism. The following figures are a vivid testimonial to the economic development of the union republics and the further consolidation of the friendship of the peoples of the USSR. While industrial goods output during the five years (1960-1965) in the RSFSR increased by 45%, it increased by 50% in Uzbekistan, by 54% in Tadzhikistan, by 63% in Kirgizia. Industrial production in the Baltic union republics grew at a higher rate than the average for the country.

The rapid economic development of the national republics is a factor of great political significance. The accounting report of the CC CPSU to the 23rd party congress states that "this is a striking manifestation of the great vital force of the Leninist national policy which shows the entire world that socialism alone opens to the people reliable courses to the rapid overcoming of economic and other backwardness and

transformation into progressive, highly industrial socialist nations. This is a firm basis for the continued cohesion of all peoples in our great and multi-national homeland."

The new Five-Year Plan envisages a further powerful upsurge of the economy and culture by all union republics.

The rapprochement of the nations and the peoples of our country is being actively promoted by the grandiose cultural construction and ideological work of the party. An extensive exchange of spiritual riches is currently taking place among the peoples; a process of a mutual drawing together of the national cultures and their comprehensive enrichment is proceeding and their ideological unity is increasing.

The strength of the friendship and mutual assistance of our peoples was exhibited in an extremely vivid manner during the period of the natural calamity of the earthquake in Tashkent. As a result of the earthquake thousands of Tashkent families were left without homes. News of the terrible calamity which struck the people of Tashkent upset all Soviet people. Hundreds of thousands of Soviet citizens of the most varied nationalities stated their desire to aid the Uzbek people and to take part in rebuilding the city. The multi-national army family also came to the assistance of the people of Tashkent.

The CPSU and the Soviet government not only show concern for the friendship of the peoples of the USSR but also attach vast significance to strengthening proletarian internationalism, the cohesion of the peoples of the socialist camp. The importance and necessity of the further cohesion of the countries of socialism are stressed with particular force by the course of events in Vietnam where the USA is escalating its criminal war against the peoples of South Vietnam and is expanding its aggression against the DRV. The December Plenum of the CC CPSU (1966) stressed once more that the Soviet Union will continue to render comprehensive support for the heroic struggle of the Vietnamese people against the criminal aggression of the United States. Incidentally this assistance could be even more effective if it were not for the current position of the leaders of the CPC and the CPR, the only socialist country bordering directly on the DRV. Instead of consolidating in a single front against the American aggressors the leaders of the Communist Party of China and of the Chinese Peoples Republic come out against it and in essence through this encourage American aggression.

The inviolable friendship of the peoples of the USSR is of great significance for the further strengthening of the combat readiness of the Soviet Army and Navy.

The communist party trains Soviet troops in the spirit of proletarian internationalism and friendship of peoples. Russians, Ukrainians, Belorussians, Estonians, Moldavians, Kazakhs, Latvians, Georgians, Armenians, Uzbek, Lithuanians, Turkmenians, Tadzhiks, Yakuts, Kirgiz and Azerbaydzhanis -- soldiers of all nationalities of our great homeland stand shoulder to shoulder in the inviolable combat formation.

The friendship of the peoples of the USSR binds the army ranks together. During the process of the strenuous military work and the daily contact among soldiers, sergeants and officers of various nationalities an intimacy, a mutual spiritual enrichment, common characteristic features, common views and a correct understanding of the vital interests of the working people of all nationalities of the Soviet Union are developed.

Nothing of a similar nature exists in the armies of imperialist states. There the military personnel are trained in a spirit of great power chauvinism, arrogance, conceit and disregard for oppressed nations.

СВЯЗИ ВОЛ БЕЛКОДРОБЕ



A graphic example of such ideology is the criminal war of the American imperialists in Vietnam. The American chastisers, reviving in our day the bloody crimes of the German fascists, strive to crush with fire and sword the resistance of the Vietnamese people for freedom and independence.

The number of crimes committed by the American servicemen in this country grows with each day. Looting, punishment without trial and investigation of people of no use to them, the mocking of women, speculation and many other serious criminal acts have become an inseparable part of the way of life of the American soldier. The aggressors have committed a new and heinous crime. They subjected the capital of the DRV, Hanoi, and particularly its residential areas, to bombing.

The American war against the people of Vietnam, states the declaration by the Soviet government of 15 December 1966, is the most cynical manifestation of the aggressive policy of American imperialism and a violation of international law and the generally accepted norms of mankind's morals and humaneness.

No matter what means the American interventionists use, their aggression is doomed to failure. The sympathies and support of all honorable people throughout the world are on the side of the struggling people of Vietnam.

Soviet soldiers are the sons of all peoples of the USSR. Their friendship, sealed by blood during the years of the Great Patriotic War and tempered in the daily military labor, aids them in their training and unites them into a single fighting collective.

Army life is rich with numerous examples of fraternal friendship and the comradely mutual assistance of soldiers of different nationalities. Thus, Russians, Ukrainians, Tatars, Moldavians, Estonians and Latvians are serving in the motor transport company commanded by Maj. V. Boychenko. This multi-national military collective lives with common tasks and aspirations. All soldiers fulfill in an exemplary manner their service. It has become a good tradition in the podrazdeleniye to help each other in military and political training and in the study and use of weapons and military equipment.

Master Sergeant reenlisted service I. Ivanchenko, a Ukrainian, has much deserved prestige in the company. This is one of the most experienced driver instructors. He can often be seen with the soldiers. He shares his experience during casual and comradely discussions. Master Sgt. Ivanchenko worked particularly hard with Private R. Zakikhulin who had difficulty with vehicle parts. A Moldavian, Private I. Khalyuk, patiently helped Private N. Strekolovsky with technical training. This comradely assistance bore fruit.

Welded by a unity of aims, interests and fraternal friendship, the soldiers of the podrazdeleniye are successfully fulfilling the tasks assigned, are careful with their equipment and are thrifty in their use of fuel and equipment.

The work of the Soviet people and the military life of the Soviet soldiers abound in similar examples. This is one of the striking proofs of the strength and inviolability of that friendship of peoples which has a firm economic, political and ideological foundation.

Friendship among equals in those achievements that have been reached by our Soviet country is our most valuable property and most reliable guarantee for the successful progress toward communism. The comprehensive consolidation of the friendship of the Soviet people is the most important factor in increasing the defense capability of the socialist state, the growth in the might of its armed forces and the perfection of the moral and political qualities of the soldiers and sailors.

## THE MEMORY OF THE HEROES IS IN OUR HEARTS

Major V. Suslov

As you enter the post of this chast', you involuntarily glance at the bust of Hero of the Soviet Union Sergeant Viktor Petrovich Miroshnichenko. The hero looks out over the field where the drill exercises are held, he looks out over the morning assembly and seems to say: "Good lads, soldiers."

Yes, the soldiers of the chast' are true to the legacies of their fathers. Their acts speak of this. All chast' personnel successfully cope with their productive tasks. Outstanding results are achieved by the men of the company whose roster eternally will carry the name of the hero. They overfulfill their plan every month. Sergeant Miroshnichenko is always with them. The company Sergeant Major always calls his name out at the evening musters.

"There is not one soldier who has not fulfilled his production norms," states the company commander, officer V. Roslyakov. "We also fulfill the production norms for Viktor Petrovich Miroshnichenko."

The men under Sergeant Khamrakul Eshimov work particularly well. They are komсомол members Private First Class Al'fons Dombrauskas, and Privates Andrey Popov, Mukhamed Yuldashev, and Valentin Kostin. Competing, they give 1.5-2 times the norm per shift in the laying of switching assemblies.

"And on our right flank, competing in our squad, is Viktor Petrovich," says Private First Class Dombrauskas.

... The rain had been falling for several days. The rain beat without pity against the ground. Streams of water filled the hollows under the supports. The plan for the electrification of the railroad sector was endangered. But the soldier-railroadmen did not give up. Under the continuous rain, knee-deep in water, they continued to fulfill their task.

"At times it seemed that fatigue would break me," relates Ergash Dzhurakulov. "Rain and sweat filled my eyes. But I thought, 'How would Sergeant Miroshnichenko act in my place?' And I continued to work."

... A quarter of a century has gone by since the time that Sergeant Viktor Miroshnichenko performed his exploit in the lands of Smolensk. The group of soldier-railroadmen which he headed was given a combat assignment -- to blow up the railroad bridge across the Snopot' River upon the approach of the fascist troops. The Germans were already at the bridge when a shell fragment cut the Bickford fuze. The fearless komсомол-soldier threw himself to the charge and ignited it. There was an immediate explosion. At the cost of his own life, Sergeant Miroshnichenko carried out the combat task.

The exploit of this ardent patriot was highly evaluated by the Soviet people. Viktor Petrovich Miroshnichenko was posthumously awarded the title of Hero of the Soviet Union. His name has been perpetually enshrined on the rolls of one of the railroad chast'. The story of the unequalled exploit is told in the room of combat glory established in the chast'. More than 2,000 people have visited it. Veterans of the chast', men who served with the hero, read lectures and speak of his undying exploit. The visitors leave stirring comments in the record book. Here are some: "Sergeant Miroshnichenko is my favorite hero. I swear to carry out my military duty just as he would." These are the words of soldier-railroadman Sergeant Aizbek Merzaliyev. "We will live and study in the same way that Hero of the Soviet Union V. P. Miroshnichenko lived and studied," write the school children.

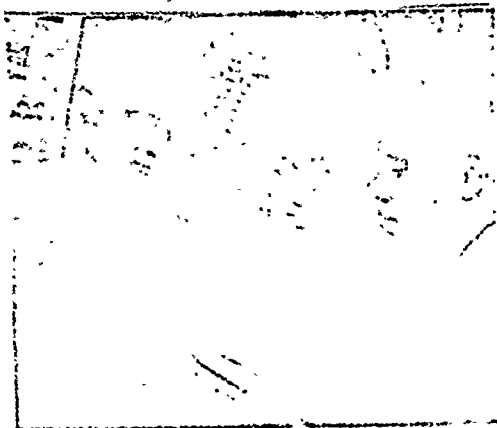
... The youthful square comes alive near the bust of the hero in springtime. What do the leaves murmur? Maybe they repeat the words of the Homeland: "No one or nothing is forgotten!" The hero is always in our hearts.

## CONCERN FOR DISCIPLINE IS CONCERN FOR COMBAT READINESS

Capt. 2nd Rank G. Veprikov

Any work, large or small, the solution of any task requires strict execution of the requirements of military discipline on the part of every serviceman in our Armed Forces. There can be no success without firm discipline. The significance of this truth is particularly great at this time, in the period of the authentic revolution in military matters. The very understanding of military discipline is clearly and accurately established in the Disciplinary Regulations: military discipline is the strict and accurate observance by all servicemen of the order and rules established by laws and military regulations. But the ways and means by which firm discipline is achieved are very varied. There are also many factors influencing the state of discipline in any collective. In nearly every magazine article or newspaper column devoted to discipline we can find grains of some work experience in this field. There is this experience in our chasti' of the fleet rear. We would like to discuss some of its facets.

Several years have gone by since changes were introduced into the Disciplinary Regulations of the Armed Forces USSR: in the sections defining the disciplinary rights of commanders and chiefs, first to be mentioned are the measures of commendations and then the measures of reprimands. The "Reprimand and commendation card" has been replaced by a "Service card" whose first page is given over to the listing of commendations given to the serviceman. There is a great thought in these changes: in the practical work of educating the personnel, primary use must be made of the effects of positive examples -- the effect of commendation. This is what we direct the attention of all of our podrazdeleniya commanders. Not too long ago, the names of individual undisciplined servicemen were better known to the personnel than those of the outstanding men. This, of course, cannot be considered as a normal condition.



GRAPHIC NOT REPRODUCIBLE

The room of komsomol glory is situated next to the library and soldier cafe. It was established on the initiative of the VLKSM Committee whose secretary is Master Sergeant reenlisted service Ya. Demkiv. The komsomol members and activists meet here in order to discuss business and to map out the work plans. The young soldiers study the komsomol history at attractive stands. Here, the men who join the Komsomol receive their komsomol cards. The photo shows the VLKSM committee secretary, Ya. Demkiv (center) and komsomol activists Privates First Class V. Glushko and A. Gavrilov.

Recently, the propagandizing of the leading experience has been improved considerably. The best men have been given the highest awards. Last year, a group of servicemen received a commendation from the fleet commander because of successes in supporting the high combat readiness of ships and chasti. The Komsomol organization, whose secretary is Senior Seaman V. Cherednichenko, was awarded the challenge Red Banner of the fleet rear. At the assemblies of junior commanders, V. Cherednichenko told why their podrazdeleniya have had no major violations of discipline for two years. The primary reason is the systematic inculcation of each serviceman with a feeling of high personal responsibility

for his assigned tasks. For this reason the men are constantly improving their knowledge. Nearly all of them are first class specialists, all are outstanding in combat and political training. The ten best Komsomol members have been awarded the "Outstanding Member of the Navy" chest insignia. An important role in the disciplinary work of this collective belongs to the junior commanders. And the basic means of education is the commendation and not the reprimand.

We have set this goal for ourselves -- in each podrazdeleniye, all must know the names of the best specialists, rationalizers, and sportsmen. Our propaganda is helped considerably by Command the political section of the fleet rear, as they organize meetings of outstanding personnel and assemblies of junior commanders. The Political Directorate of the fleet published leaflets on the leading personnel of our chasht': E. Khudayberganov, Yu. Koroy, V. Cherednichenko.

The strength of positive example is very great. Therefore, we constantly seek new methods and forms of propagandizing all that is leading.

In the achievement of a high discipline based on deep political convictions and of a strong discipline, the decisive role is given over to active mass-agitation work. At the present time, particular attention is given to the propagandizing of the revolutionary and combat traditions. The army and the people must be ready for war not only in a material sense, but also spiritually. A high combat spirit, the ability to fight the enemy boldly and conquer him has always been characteristic for our army. Vain are the attempts of the ideologists and propagandists of imperialism who are striving for their dream castles -- to make it so that the Soviet Army would not have its Matrosov or its Kosmodemyanskiy. Millions of our country's young people are willing to undertake any exploit in the name of the freedom of our Fatherland. The wonderful qualities of patriotism and readiness for self-sacrifice for the happiness of the people are being constantly indoctrinated into the youth of the Party and the Komsomol.

Much has been done in our chasht' recently that is useful in the field of propagandizing the revolutionary and combat traditions. Interesting meetings have been held. The personnel have been visited by veterans of the revolution and war heroes, by Party and Soviet workers, and by literary people, and by city and rural workers. There was an inspired meeting with the old Chekist, the hero of the story "Ground Swell", Toyvo Vyakhi. The men listened to his story with bated breath. The story of the revolution. Feliks Dzerzhinskiy. The famous VCHK. A clear and inspiring picture formed before the eyes of the young listeners.

We remember the sacred commandment -- to defeat the enemy you have to learn to hate him. On the initiative of the VLKSM committee, an evening was held on the subject "There is no place in the world for fascism". This was a sort of open public court against fascism. Materials were presented on the atrocities of the hitlerite barbarians. Servicemen who lost their fathers during the war spoke at the meeting. A great impression was made on the listeners by the talk of the former prisoner of Mauthausen Camp, the author of the book Rescue from Hell, Vsevolod Viktorovich Osten. "No, never again must the horror of fascism be repeated on this earth. We will not permit this," such were the thoughts of all who listened to his true and inspiring tale. Undoubtedly, all of these meetings played more than a minor role in strengthening conscious discipline and facilitated each serviceman's feeling that his service in the Navy is a high honor.

Exhibits in the combat glory room, established a year ago by the komsomol members, tell of the heroic past of the sailors of the twice Red Banner Baltic Fleet. Much work in setting up the room was done by

political workers--officers A. Baylov and Ye. Potrov. Seaman G. Mol'nik drew portraits of the Baltic heroes. We held discussions with the young replacements at these stands. The personnel had an interesting excursion to the museum of combat glory of the fleet and to the monument of the guardsmen heroes of the storming of Königsberg.

Special book exhibits in the library, film festivals, readers conferences, lectures, discussions, and political information -- we use all of these work forms for propagandizing the revolutionary and combat traditions. So that it would be even more interesting and realistic in the future, we held an open Komsomol meeting at which the report "Let us preserve and multiply the revolutionary and combat traditions of our fleet" was discussed.

Life convinces us more and more that the propagandizing of the revolutionary and combat traditions of the Soviet people is a wonderful means for educating the highly conscious and disciplined warriors who are totally faithful to the socialist Homeland.

At a party meeting held a year and a half ago on exposing the causes of infractions committed by servicemen, the communists came to the conclusion that the greatest evil is the conniving and liberal attitude toward the violators of discipline. The fear of presenting reports with a large number of reprimands finally resulted in undesirable results. Thus it was, for instance, in the collective headed by officer Ye. Levin. When one of the servicemen committed a gross violation of discipline, no one brought up the primary point, that of taking the title of outstanding away from the podrazdeleniye. The incident was simply hushed up. Another violation took place and the outstanding title had to be taken away from the podrazdeleniye.

Remembering this, the communists decided to put an end to this eye wash. It was not easy to correct the errors. A systematic analysis of disciplinary practice by the officers and junior commanders helped in this. Individual attempts to cover up the situation were dealt with sharply and critically. The workers of the political organ did much work in the podrazdeleniye. A special role was played by a check on the observance of Soviet law in questions of disciplinary practice conducted by the military justice personnel. For example, they exposed unattractive facts associated with the reporting on disciplinary practice. Comparing the data from the service cards of the servicemen on infractions of discipline and the protocols of the komsomol meetings, facts such as the following were revealed. At the meeting concerned with the personal actions of two members of the VLKSM, the komsomol members determined that the violations of discipline consisted of drunkenness. The meeting reached its decision with an appropriate wording. On the service cards of these servicemen carried a reprimand with a slightly different wording for the same violation. And in the reports, these violations were listed under "others". It is quite clear that practice such as this brought forth a falling off in discipline. Serious conclusions were drawn from this. The intolerability of such facts was brought to the attention of all commanders and chiefs.

An end has been put to the incorrect practice when the state of discipline was not determined by the actual state of the matter but by the number of disciplinary reprimands. Tables showing where and how many reprimands were given began to be demonstrated less and less at different meetings. Attention is now being accentuated on the actual state of discipline, on questions of combat training, on the combat readiness of the podrazdeleniya, and on those violations on which no measures had been taken. Sharp criticism is levelled when violations of military discipline are not properly evaluated and acted on. More severe reprimands are now meted out to those officers and junior commanders who do not demonstrate high demandingness to their subordinates.



It was just this basis that the party organizations posed the questions to communist Yu. Tikhonov. For a long time, discipline in the podrazdeleniye he commands was at a low stage. At the meeting of the party committee, the communist was requested to explain why the junior commanders are not highly demanding of undisciplined personnel, overlook so-called "minor" infractions and rarely apply their authorized disciplinary rights. Why do not the commanders rely more upon the kom-somol bureau in their struggle for strengthening discipline? We were convinced that this placement of questions was the most correct. It permits a correct determination of the state of discipline, exposure of the causes of infractions, and to find the best ways and means for its further strengthening.



Complex equipment is now in the hands of the personnel of the fleet rear. The photograph shows: Engineer Captain-Lieutenant O. Golovs with a group of specialists at a regular training session.

**GRAPHIC NOT REPRODUCIBLE**

The elements of the wonderful are demonstrated with greater boldness and insistence in our reality and in our everyday life. It cannot be confirmed that it was our generation which uncovered the ability to understand beauty. It is just that we have a greater opportunity than any one else to make use of this boon. It seems that in the field of esthetics there still are many problems which, undoubtedly, are of interest to all who are concerned with military upbringing. It is now perfectly clear to us that the esthetic education of the men has a direct bearing on the solution of particular military tasks -- the establishment of a strictly established order in the chasti and aboard ships, the inculcation of the men with such qualities as politeness, industriousness, etc.

We have become convinced from experience of the importance of educating the warriors in the spirit of high discipline and how it is facilitated by the surrounding situation. Last spring we discussed how best to achieve this. Our artists and the non-T/O photographer visited the neighboring podrazdeleniya, the Officer's House, and the sailor's club, became acquainted with their set-up and presented a series of sketches. After this, the plan was approved for bringing the military post of our chast' into model order.

A monument to V. I. Lenin was set up in the post's central square with the following inscription on the pedestal: "His deeds are deathless". Not far from the monument is a portrait gallery of the leading personnel of the chast', many flowers have been planted and the stadium put in good order. The men worked well in putting the dining room into order. Now in its furnishings it rivals the city cafes: it has porcelain dishes and new tables with hygienic covers. "Articles also educate" said the great Russian pedagogue Ushinskiy. It is difficult to carry oneself poorly there where there is ideal cleanliness and model order.

Much effort was put out by the personnel in order to bring about model order at the working sites. The training base was also renovated.

Is it possible to overevaluate the role of drill exercises in educating the warriors with high discipline? Elements of esthetics are visible here. This is seen in the attractive formations, in the well fitting uniforms, and in the playing of the brass band.

We must not forget that each year new replacements come into the fleet with ever increasing intellectual demands. The youth are interested in art and literature. That is why in our chast' we warmly greeted poet Vladislav Zorin, the author of a series of verses My Russia, and the fleet's poet Captain-Lieutenant Nikita Suslovich. Officer Anatoliy Buylov, the author of several poems about the fleet, was the initiator of the publication of two poetic works collections in our chast'. The collection of poems "Youth at Their Posts" was dedicated by our amateur poets to the 23rd Congress of the Party. On the anniversary of the Lenin Komsomol, a youth evening on "Our contemporary in the poetry of the sixties" was organized on the initiative of the VIKSM committee and the library aktiv.

Will this arduous effort be effective in strengthening discipline? We are convinced that it will, and very much so.

Last year our chast' successfully coped with the tasks of combat and political training, received the highest mark in combat readiness, and took first place among all of the chast' of the fleet rear. These successes are due to the active struggle of the entire collective for a strengthening of military discipline and in bringing about a strong prescribed order. But, in a critical evaluation of their work, the communists also see the unused potentials for a further strengthening of discipline. These, in particular, were discussed at the recent report and election party meetings. We must make a more thorough study of the people and bring all of them into active public activity. We should improve the quality of the mass agitation activity devoting particular attention to wall press and the councils of the Lenin rooms and the rooms of combat glory. The komsomol organizations are continuing to expand the struggle for the achievement of high results in the socialist competitions held in honor of the 50th anniversary of Soviet rule.

The accumulated experience plus the exposed potentials will undoubtedly assist us in the new training year to raise the level of discipline even higher so that it would answer the new increased demands.

СВЯТЫЙ МОЛ ВЕРНОСТИ

## STUDY ALWAYS AND EVERYWHERE

Lt. Col. A. Yaremchenko

The new training year has begun. The men of the rear podrazdeleniya also joined the intensive combat training. As we know, one-third of the total training time is set aside for studies with the junior specialists of the rear. The rest of the time they work at the various sites supporting the personnel of the combat podrazdeleniya.

The work volume of the actual support of the podrazdeleniya is quite large. Some rear workers frequently say as a joke: "If a day had 48 hours it still would not be enough to do everything necessary in the rear service." There is a modicum of truth in this. However, the junior specialist must also find the time for study. He is obligated to study and know all of the combined-arms items and, at the same time, all of the problems for his specialty so that he would be a thoroughly trained warrior.

How do our rear podrazdeleniya utilize their training time?

We will not delve into an examination of the questions of combined-arms training of the rear personnel. Inspection results indicate that the men of many rear podrazdeleniya obtain outstanding and good results on combined-arms subjects. Thus, the motor vehicle personnel under the leadership of Lt. Col. N. Nemilov for several years now have received outstanding marks in the summary inspections on drill, physical, and firing training. The supply and service platoon personnel of the chast where the deputy commander for rear is Lt. Col. M. Sagdiyev received an outstanding evaluation for line training during the summary inspection in 1956.

But in some podrazdeleniya, not everything is smooth in special training. This exists only because some rear officers do not always properly evaluate the importance of the professional training of the rear podrazdeleniya personnel, do not see the direct relationship of the quality of the practical work of the junior specialist to his specialized knowledge. Facts may be provided which show that in those rear podrazdeleniya where service is poorly established there is where the special training is in bad shape. Conversely, there where training is well organized, the state of service is also at a high level.

There still are those chiefs of services who, unfortunately, give but little attention to conducting special training exercises with their subordinates. Some of them conduct these exercises quickly and saying, in so doing, "It is necessary to work and not be concerned with theory." Others respond to the question of why special training is not being well conducted with "And when to study? Is there no end to work?", or "Am I going to read lectures to one warehouseman when there is an overabundance of work at the depot."

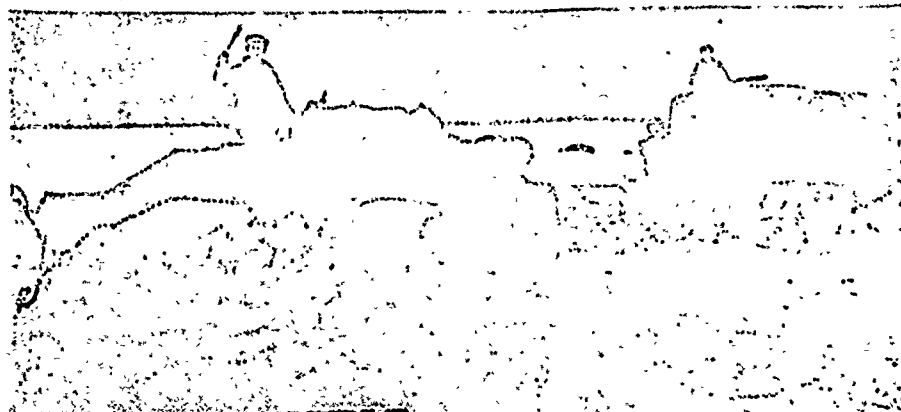
These comrades are very wrong. First, an untrained man will not carry out his practical work as it should be. And only because no one taught him how. Second, it is not obligatory to read lectures to just one warehouseman. Lectures are useful at assemblies. It is necessary to have discussions with the junior specialist, give him individual study, work with him at his place of work.

We would like to discuss in a little more detail and share some experience on the subject of practical special training exercises at rear sites.

Very positive results are obtained in the training of the junior specialist at his place of work when the study subject is tied in with the practical activity.

Let us take this example. The chief of food supply of the chasht' is to hold a 4-hour study with the food warehouse chief and warehouseman. He becomes acquainted with the program, checks the condition of the warehouse and makes the decision that the study should be conducted on the subject "Arrangement and equipment of a military chasht' food warehouse." Why did he select this subject? Because in his opinion it had not been fully developed and as a result of his inspection, determined that essentially the warehouse and the distribution store-room had many violations and some of the equipment required repair. He decided to conduct the study in this way: the first 30 minutes to be given over to theory (delivered by himself); three hours for practical work (the trainee does the work independently); and the last 30 minutes to be used for checking the work accomplished and making a summary and an analysis of shortcomings (conducted by the chief of service).

During the three hours of individual work, the warehouse chief and the warehouseman bring on order in the way that it was explained to them and the task set by the chief of service, repair the equipment and carry out other duties. During this time, the chief of service occupies himself with other important matters of which he always has many.



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#### Clearing of winter roads

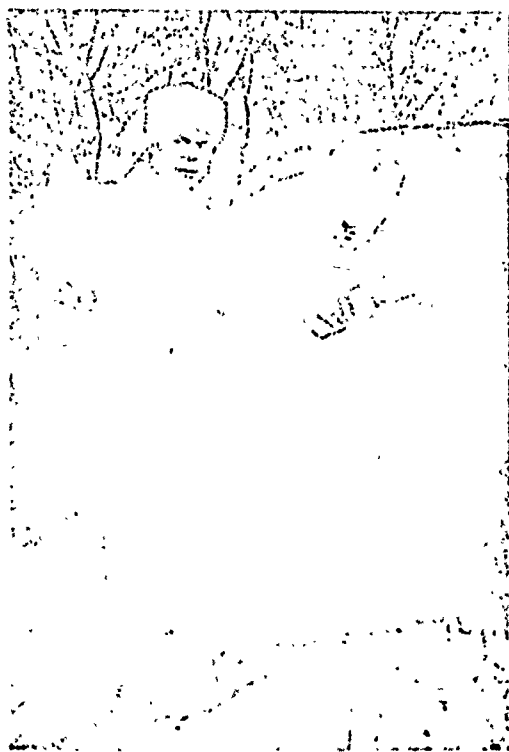
This also can occur. On the day of the special training exercise, an urgent matter came up; for example, the acceptance of food supplies being delivered by railroad. This work cannot be put off. Then the chief of service decides to replace the planned exercise subject with another one which corresponds to the forthcoming work, for example, the "Acceptance of food supplies delivered by railroad and filling out the documents." He sets aside one or two hours for this and devotes the rest of the time to the subject "Order and methods of placing food supplies in the warehouse."

In both cases, theory is closely associated with the practical work. In other words, the work did not suffer and the exercises were carried out. The main thing is to see that the exercises would be carefully readied and would not have the stamp of formalism and hurry.

For instance, exercises with the subordinates is well organized by the assistant commander for supply, Major N. Starykh. He frequently holds such exercises at the working places of the junior specialists, knows the volume and nature of the work, the degree to which the training program has been fulfilled, and closely accounts the themes which have been studied. This helps him to train good workers from among the junior specialists.

In order that high quality exercises would be conducted at the rear sites and that the junior specialists, in their free time, would be able to perfect their skills independently, it is important that each site would have a well equipped training corner containing two or three stands with training documents and visual aids. Such corners may be set up at any working site: in the distribution storeroom of the food warehouse, at the fueling point in the fuel depot, in the admissions room of the medical point, in the cooks' rest room, etc. The visual aids must be renewed each time with consideration for the new training tasks.

We feel that practical studies held at the place of work is one of the basic methods for the professional training of the junior specialists. This does not mean, however, that they should not study under other conditions. They must study always and everywhere, and their chiefs must make use of any situation, of each free moment for improving the knowledge of their subordinates.



The officers of the chast' headquarters work in close contact with the chiefs of rear services during field exercises. In the photograph: the chief of clothing supply of the chast', Major S. Bayazitov (left) and staff officer G. Petrov clarify the location sites of the rear sites.

**GRAPHIC NOT REPRODUCIBLE**

Rear classrooms which are well equipped also bring great usefulness to training. Productive training goes on in such classes. Valuable initiative was demonstrated by the drivers in one of the rear podrazdeleniya. Under the leadership of Senior Sergeant reenlisted service I. Sidorenko, they made an electrified mock-up with every possible type of road fork and crossing, streets, and railroad crossings. This visual aid has considerably improved the training methods on the rules of street traffic. The cupping of the mock-up provided a fertile field for the rationalizers and skillful individuals. The driver frequently frequent the classroom where the mock-up is set up. Independently and collectively they examine the rules of vehicle movement and increase their mastery.

But the best method of training is the tactical and special exercises and studies conducted with the personnel in the field. For example, the field exercises held with the fuel dump, where the warehouse chief is Senior Sergeant reenlisted service A. Stepanov, were very instructive. He ably taught not only the junior specialists of the fuel supply service but also the fuel truck drivers who came to the dump for

fuel. This was facilitated by the fact that all elements of the dump were fully deployed: the dump's pipelines, the rubber-textile containers, and the vertical pipes for mass fuel delivery. During the exercise, use was made of the available mechanized and manual pumping devices available at the dump. Due respect must also be given to the exercise director, Major I. Abramov. Becoming acquainted with the tactical situation, he provided inputs so that each participant would fully comprehend that intensity which would be in a combat situation.

And, finally, the practical work of a realistic support of the troops must strengthen and polish that knowledge which has been obtained from the exercises. It can be looked upon as an examination for any specialist following his course of training. The junior specialists of the rear take such "examinations" every day. Therefore their work must be closely tied in with training.

So, we came to the conclusion that the junior specialists of the rear must consider always and everywhere: at the place of work, in the class, in the field, and at practical work. This also must not be forgotten by the chiefs of services. They must plan their work and training in a sensible manner. In connection with this, we would like to say a few words about the planning of special training and administrative activity.

For a long time we have had our own type of debate -- for whom and how to plan the exercises on special training: to the chief of service by individual orders or to the supply and service platoon commander according to the data of the chiefs of services in the overall training orders for the supply and service platoon. The latter turned out to be the most acceptable. But in so doing it is incorrect to write the following opposite the hours for special training in the training order for the supply and service platoon: "According to the plans of the chiefs of services." The chief of service can compile an order and keep it for himself, but if the training order is posted in the barracks then the personnel will read it every day.

As practice has shown, this is the account of developed subjects on special training which each chief of service must keep. The platoon journal cannot be issued simultaneously to all of the chiefs of services for the exercise. Moreover, there are times when the chiefs of services will have to shift the exercise or replace one subject with another. This is why they must take these changes into account.

It is generally better if the rear officer would plan his work and training in the working notebook. At the last methods assemblies, we devoted considerable attention to the planning of administrative activity and special training in the rear podrazdeleniya and advised each chief of service to have such a notebook. It is recommended that the following sections be made in the notebook: suggestions by service in the annual administrative plan; the monthly work plan; the private work plans; the subjects and calculation of hours for the special training of the junior specialists; an account of attendance at the exercises and the subjects developed on special training; an outline of the exercises conducted; basic data and norms for the service. In this way, all questions on current administrative activity and training will be concentrated in one place. This will permit a more purposeful handling of the many varied activities on the rear support of the combat podrazdeleniya and an increase in the combat readiness of the chast'.

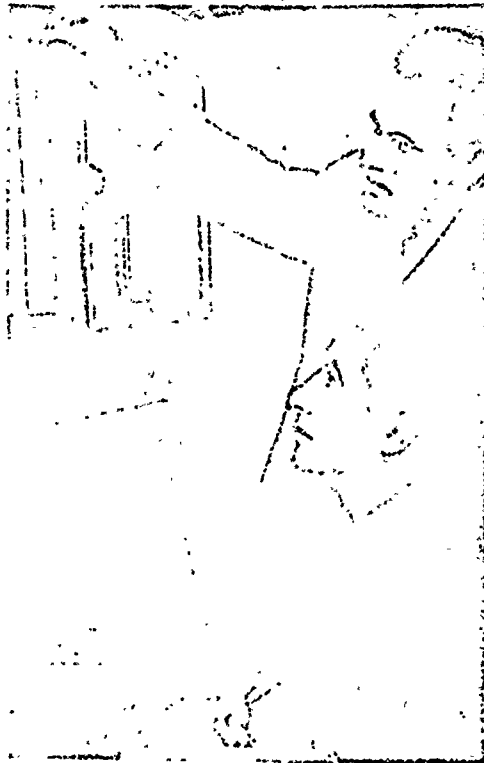


## ENTHUSIASTS

There are many questing individuals, truly in love with their work, among the fuel supply officers. They actively conduct scientific-research work, strive to find and do find the most effective methods of using fuels and lubricants and technical means which respond to the contemporary requirements.

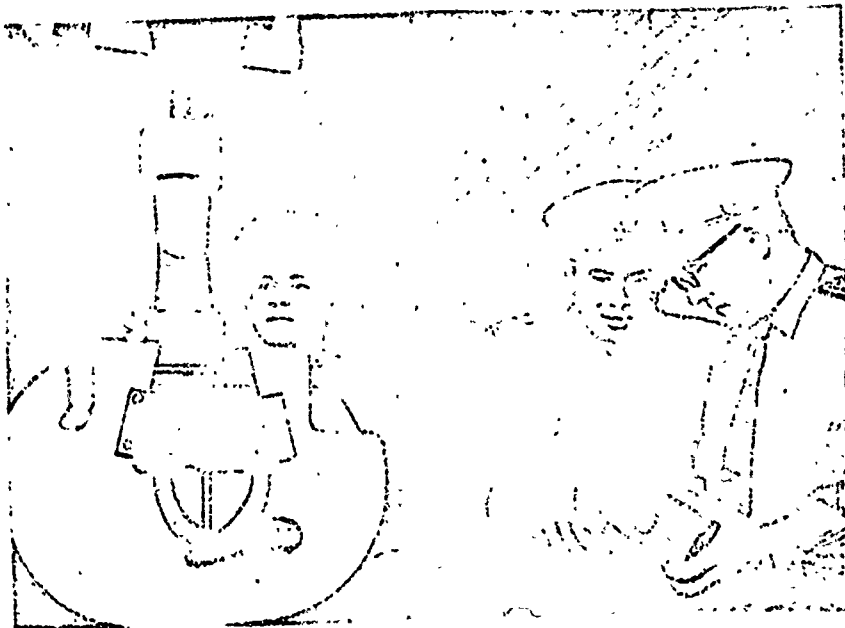


Candidate of technical sciences Engineer Lt. Col. A. Chirkov studies fuel stability.



Engineer Capt. V. Kovalenko and Engineer Lt. Col. I. Stryuk conduct a routine experiment in the laboratory.

## GRAPHIC NOT REPRODUCIBLE



Testing of fuel repumping pipes are conducted by officers (from right to left) K. Satirev, M. Kravtsov, and S. Men'shikov.

## TRAINING ASSEMBLY ON THE PRETRAINING OF YOUNG DRIVERS

Colonel N. Pisanny

So that the young drivers who received their qualification prior to army service would be able to make a more thorough study and practical mastery of army vehicles, it is useful to conduct a special two month assembly with them.

The following may be basic tasks of the assembly: studying all types of vehicles available in the chast<sup>o</sup>; the inculcation of firm skills in cross-country movement in a column, at night, with the use of lighting techniques and means of increased roadability, with trailers and with combat equipment; studying the operating principles of vehicles in the Soviet Army and mastering their maintenance under fixed and field conditions.

The assembly can be conducted at a soyedineniye level or else by chast<sup>o</sup>, while in the motor transport podrazdeleniya -- in the battalion or even by companies. In so doing it is possible to make a better selection of the instructor-teacher staff, issue the necessary number of training vehicles without decreasing combat readiness.

The duration of the training day should be set at 6 hours and 2 hours for individual training, and 5 hours for pre-holiday days. When necessary, the hours set aside for individual training can be used for planned studies.

The organization of the assembly is announced in the order of the day by the soyedineniye (chast<sup>o</sup>) commander which indicates the time it is to be held, the assembly leader, the officer-instructors, the instructors for practical vehicle driving, the training base, and the material and technical support. At the assembly time, the young drivers are formed into separate podrazdeleniya and are freed from duty and administrative activities.

The assembly leader should be a combined-arms officer: the commander of a motorized rifle (tank) battalion, while in the motor transport podrazdeleniya they should be the company commanders.

It is best for the young drivers to be trained within the composition of a platoon. The studies on political training, military topography, motor-tractor service, and the arrangement, operation, and repair of vehicles are conducted by officers, while drill and physical training, Soviet Army regulations, and driving rules are conducted by sergeants.

The assembly leader or chief of the motor-tractor services holds instructor-systematic exercises with the exercise leaders with the aim of deepening their theoretical knowledge and perfect their practical skills and methods mastery.

Driver pretraining must be conducted with those types of vehicles which are assigned to them in the podrazdeleniya.

The main assembly objectives are those of driving, the features of army vehicle arrangement and their maintenance. A calculation of the hours can be as shown in the table.

The basic training method is that of class-groups and practical exercises.

It is recommended that a wide use be made in the class-group exercises of visual training aids, particularly of parts, mechanisms,

devices, and cross-sections of the assemblies of vehicles being studied. The devices, mechanisms, and assemblies are studied in the following sequence: designation, location and fastening, general arrangement and principles of operation, basic malfunctions, their causes and elimination.

Table of approximate calculation of hours by training subject at the driver pretraining assembly

Subject designation	Number of training hours	
	Total	Number for practical training
Political training . . . . .	32	---
Drill training . . . . .	6	6
Physical training . . . . .	24	24
Soviet Army regulations . . . . .	6	2
Military topography . . . . .	4	2
Motor-tractor service . . . . .	16	12
Vehicle arrangement . . . . .	40	19
Vehicle operation . . . . .	69	53
Vehicle repairs . . . . .	10	10
Driving rules along streets of cities, settlements, and roads of the USSR . . . . .	16	---
Vehicle driving rules . . . . .	11	---
Vehicle driving . . . . .	33	33

Practical exercises on the arrangement of vehicles and their maintenance can best be carried out at maintenance points and in the repair shops. In so doing, special must be devoted to inculcating the drivers with practical skills in the maintenance of those T/O vehicles which are assigned to them.

Driving exercises are under the guidance of the officers of the motor-tractor service using the T/O vehicles assigned to them. Primary attention is given to field skills. Therefore it is recommended that the majority of exercises be conducted in the field, in the motor pool and vehicle ranges directly with the vehicles.

The field exercises should be well supported with motor-tractor equipment, mobile maintenance and service facilities, the means of protection against weapons of mass destruction, and with everything necessary for the full processing of the subjects studied. Through the use of special disciplines at the practical exercises, efforts are made to have the drivers fulfill the entire gamut of recommended operations, and to inculcate them with technical efficiency.

The rules for driving along the streets of cities and settlements and on the roads of the USSR may be studied both in classrooms and in practical exercises of vehicle driving. In so doing, it is important to inculcate the trainee with a feeling of high responsibility for the accurate and obligatory observance of these rules.

Vehicle driving training usually includes: studying the content of the exercises and rules of driving, training in the operating principles of the steering mechanism and exercises in practical vehicle operation. The contents of the exercises and the vehicle driving rules are studied at special exercises through the method of stories, discussions, and demonstrations using posters, diagrams, mock-ups, training films, and training apparatus. The exercise leaders briefly describe the goal and tasks of the exercise, use the training apparatus to demonstrate the rules and methods of driving, acquaint the trainees with the organization and itineraries of the forthcoming exercises, announce

the control and evaluation standards. Knowledge of the driving rules is firmed up in practice.

The exercises are handled in the same sequence as they are set forth in the Vehicle Driving Course.

The first exercise is used to check the degree of readiness of the men for driving. Depending upon the results of this check, their subsequent training is so organized that by the end of pretraining all of the young drivers would know how to confidently drive army vehicles within the scope of the requirements imposed upon third class drivers.

Instructors may be assigned to aid the officers in showing exemplary driving techniques and for control over the poorly trained drivers.

The general order of conducting the exercises can be approximately as follows. Prior to beginning each one, the leaders check the attendance of the trainees, their appearance, and their readiness for study. In so doing, it is useful to check their knowledge on individual questions pertaining to other subjects which the trainees must know at the given exercise. Moreover, the leader must verify the materiel support. Following this he announces the exercise subject and the training goals.

The leader draws up the summaries at the end of the exercise, briefly mentions the degree to which the studied material has been mastered, indicates which training problems have been handled poorly and the order for their processing, and issues instructions for individual training.

During the individual training hours, the drivers ready themselves for the next exercise and deepen their knowledge on the manuals and regulations, the arrangement and operation of vehicles, and on driving rules. Individual training must be planned for in the exercise orders and conducted under the leadership of squad and platoon commanders.

Upon the conclusion of the assembly, the young drivers take an examination before the soyedineniye (chast') commission.

The concluding stage of the young driver pretraining is a long distance march on their assigned vehicles. Only those are permitted to take part in the march who have fully mastered the pretraining program and have passed their tests.

The march is organized and conducted by the chast' commander and his deputy. The order sets the route of march, the column composition, the time of the march, the column leaders, and the technical and medical support. The route diagram and the movement schedule is appended to the order.

It is feasible to conduct the march against a tactical situation background along highways, dirt roads, and cross country with a break away of three days from the chast' deployment area. Not less than 50% of the column movement time is devoted to night driving. The column includes combat equipment, trailers, medical vehicles, and the maintenance vehicle at the rear of the column. All of the vehicles are provided with light engineering means for night driving (light camouflaging devices, lights for use under the body or side screens, rear lights for marking off long loads, guns, and trailers). During the march, control over the march is exercised by means of flags, flash lights, and manual flares.

Upon completion of the assembly on pretraining, a chast' order is issued permitting the young drivers to vehicle operation. Subsequently their skills and knowledge are perfected in the podrazdeleniya (chasti) according to the program of raising driver qualifications to second class.

## THE GRANDEUR OF THE CALL

Everything began as usual. There was a road. From a cargo plane I watched the dark bristol of the taiga and the white canvas of the tundra fade into the distance. Then we crossed the invisible line of the polar circle, and my first meeting with you, Nikolay Mikhaylovich, at the snowed in airport. These were the days spent together in the distant transpolar garrison.

During all of these days you were busy with a thousand urgent chores. You would go to the airport in order personally to see how the airstrips were repaired for light or you were busy in the motorpool where the boiler was about to be started. You gave out orders and advice and constantly hurried people, as if you could not wait to see the first flame in its firebox. You had time to visit the auxiliary farm and to address the young people's debate "What Troubles Your Komsomol Heart?" I remember you spoke with ardor in a Komsomol manner, perky, in all probability recalling your youth that ended so suddenly in '41. You called upon youth to study Leninism and recalled the words of Nikolay Ostrovskiy that man is given life but once and spoke of the conscience of a Komsomol member: "One may withdraw from people for a time but one cannot withdraw from one's conscience even for a second." The evenings, nevertheless, remained for our conversations. Then I learned what I could not see. I wish, with your permission, to present to the readers everything that I saw and learned.

People whom I write about somehow become particularly dear to me. A completely understandable sorrow was mixed with this: one meets a good individual and gets to know him, knowing all along that very soon the inevitable parting will take place and that the chances are 9 out of 10 that fate will never again bring you together.

Time passes with events and new meetings but the old feelings remain the same. They come about in various ways. Sometimes you see a man with a frank look, warm eyes and a friendly smile. One is drawn to such a person.

Nikolay Mikhaylovich Neob'yavlyayushchiy has unsmiling eyes, a hard look and thin lips, tightly pressed together. His entire face is covered with a sort of constant preoccupation. Such is his appearance, now a word about his work.

Good fortune was with Nikolay Mikhaylovich while on duty, particularly in recent years. This was luck of a particular nature. When the time came for a transfer, there would be slots open and, as a rule, in a chast' that was lagging.

The last appointment by the commander OBATO [Separate Air Field Technical Maintenance Battalion] was no exception. He was admonished before leaving. The admonishments were approximately the same: put things in order, tighten up discipline and set things right with the management. In a word, bring up the battalion. Neob'yavlyayushchiy went and pulled it up. This means that it was not a waste to send him and that certain of the officer's qualities were recognized. He, himself, speaks of them jokingly: "I am a Siberian, a Chaldon. I am stubborn and obstinate."

One does not get far with obstinacy alone. If one were to speak seriously, these qualities appeared during the day to day and difficult work of a commander, little by little, but not of themselves and not spontaneously but at the will and through the intellect of the man.

In fact during the period when he was a young officer, it made some kind of an initial push and nature commanded: once you have become an officer, be one. Now this is life's credo for Nikolay Mikhaylovich.

But, even if he were able to do more than some others during his career as a commander, it was only because he tried very hard to view his surroundings alertly and because he had a greater desire to try to comprehend what was going on around him and to find his place as a commander within the collective and in the general system.

He often remembers with gratefulness the party organizer Likhoperskiy and what this man said to him when he was a young company commander: "Commander, go to the people, seek advice, learn and teach!"

This was 20 years ago. The communist Neob'yavlyayushchiy has understood a great deal during these years and has learned much. He understands that the commander is strong through his close ties with the collective and, therefore, he attempts to consolidate these ties. It was not by chance that an article in one of the military newspapers about the experiences of Lt. Col. Neob'yavlyayushchiy while working was called just that: "Relying on the Collective." It became one of the features of the style of his work to be among the people as much as possible, to study their mood and needs and to convince people.

The battalion commander convinces not only through words but through personal examples. No one is surprised when after having been on a flight late into the night in the morning he is at his post, always before anyone else. Once there was a problem. The water pipe that feeds the garrison and the settlement with water from the lake froze. An ice jam hundreds of meters long stopped up the pipes. The flame from the fires lit up the darkness of the polar night around the clock, and the soldiers warming up the water pipe did not leave it. Their commander was with them all of the time.

Many with whom I spoke said that the commander works without thinking of himself and with clear over-exertion. Those who are younger than he do not hide their admiration: "Where does he get so much energy; after all, he is no longer a young man." These words caught one's attention and brought up numerous questions. It appears that the commander spends day and night in the battalion. What does he have time to do besides his work? I later got exhaustive answers to these questions. But that will come later and now -- several more words about the example set by the commander. One of the comrades, in my opinion, stated correctly: "The subordinates, in general look upon the commander somewhat as if through a magnifying glass; and it is also good that they do not glorify him. That is how it is here: people see how the commander works and they simply are ashamed to work less or worse. It is like this with almost everyone. You can be sure that the Lt. Col. will force those who do not understand arguments and examples to work."

The latter was extremely significant but did not surprise me, since I had heard from others that the commander was uncompromising and extremely strict. One day I convinced myself of this personally. A staff meeting was in progress. The battalion commander interrupted himself at the very beginning of his speech in order to send one of the officers after paper and pencil, after the latter attempted to remember without notes the problems for the following week. Another, a deputy podrasdeleniya commander for technical matters was reprimanded for neglect in the work with the personnel: "You are not a smith in the podrasdeleniya and not a deputy for metal working activities. You are an officer and therefore, a leader and an educator."

Just don't get the idea that I was attending a routine "dressing down" which, although rare, is still set up for the subordinated by



overly zealous commanders. The first two facts were simply glaring. I listened and wondered how well this extreme strictness and ability to understand the soul of man, to guess all of the fine features of his psychological motivation and to explain this very convincingly to his younger comrades could be combined so well in the battalion commander. Yes, he spoke as if with equals, but senior in age and experience.

"You, comrades, explain patiently to the soldiers, in particular the young ones, everything that is taking place around them. It is very difficult for a young man who has put on a military uniform to learn immediately all of this novelty -- new surroundings, new comrades and new tasks and requirements. Therefore, patiently explain it without worrying about the time. Remind them every day and every hour of the regulation requirements, these laws which are new to them."



GRAPHIC NOT REPRODUCIBLE

Lt. Col N.  
Neob'yaul'yayushchiy

The Lt. Col. smiled his slight smile and continued:

"I remember one master sergeant. Every day he took us recruits of the war years, placed us in formation and methodically read the regulations out loud paragraph by paragraph. I don't know why but for some reason he himself called this 'reading the maxims.' So he commanded: 'Fall in, I will read the maxims.' Now, of course, such a method is archaic; but it is necessary to explain the regulations with no less zeal than was done by that master sergeant. Let every soldier understand how important his service is to the homeland. Simply say to him: 'Our company has done an important job and you have done an important job.' If a soldier serves conscientiously and works with his whole soul, it must be noted. There is nothing worse than to leave the work of a man without appreciation."

Judging by battalion affairs and by its successes, much of what was brought up by the battalion commander had been mastered well by a majority of the officers; and, having mastered it, they are guided by it in their educational work. Among these are the young but skilled leaders and educators Trofimov, Loginov, Danin, Kruglyak, Petrov, Krylov and others, whose development took place in this battalion to a great extent thanks to the efforts on the part of its commander.

Recognition of responsibility for an assigned task and the conviction of each soldier of the advisability and necessity of his work aid the battalion personnel solve difficult tasks under the difficult conditions of the transpolar area.

The battalion soldiers have been entrusted with excellent equipment. But try to start up a tractor or motor vehicle and to service a vehicle when it stands under the open sky and the temperature on the thermometer reads somewhere between 30 and 40 below, when the frozen metal burns you with its coldness and the wind knocks you off your feet. Therefore, all officers who are responsible for the equipment and their subordinates do a great deal in order to create favorable conditions for the use of the equipment. Here in the transpolar region this means, first of all, insuring the parking of the vehicles in heated buildings. The personnel work without rest on the solution of this problem. By now the majority of the equipment which guarantees the take off of aircraft and the maintenance of the runways are contained in warm enclosures.

It has become a splendid regulation in the battalion that despite any excess work for preparing flights a semiannual inspection of the equipment is conducted. Preparations for these are made as for important events. Equipment which was awarded the best evaluation for its technical condition following the inspection is placed in competition for the best piece of equipment in the battalion. The work of the drivers who have achieved best results in the competition is noted in a worthy manner.

The force of conviction and of positive examples is a great force. Officer Neob'yavlyayushchiy understands this well. His work, however, of course, is not a constant triumph of the principle of conviction. The battalion commander is far from believing that simplified concept of the thesis that "people who are incorrigible do not exist," which sometimes gives birth to harmful liberalism with regard to people who, if not incorrigible, are clearly uneducated and during the course of some time do not desire to understand and fulfill the difficult requirements of military discipline.

"In reality the nobleness of the tasks, the firm army system and the atmosphere of military collectivism," he says, "open up wonderful opportunities for the education and re-education of men. But education is a prolonged process. From the moment of birth man absorbs certain views, habits and temper. His qualities are formulated on the basis of these. These are wonderful qualities among the majority of the young soldiers. What happens if for some reason a man develops qualities which are unfit for a soldier in our army? Can this happen? Yes, it happens although not very often. If these qualities, in manifesting themselves damage our army system and the stability of our discipline, I give you my word that my hand will not shake when applying the most drastic measures to change such a person. At one time such a person was Officer Dem'yanchuk. Undisciplined and stubborn, he simply did not consider it necessary to carry out orders from above to the letter. Here is an example. An inspection of equipment was being held in the battalion. Dem'yanchuk was ordered to inspect the equipment in a neighboring podrazdeleniye and refused. He said, 'I don't want to spoil my relations with the commander.' In the end he finally carried out the order. Of course, in this case I can not limit myself to an explanation alone. Within one year the party bureau discussed his conduct twice and twice, as they say, I had to 'exercise my authority.' It is difficult at present to give a guarantee but the officer has begun to view things differently."

I understood not only from this conversation with the battalion commander but in general during the time of my visit in the garrison that, when I told of the strictness and severeness of the commander, it was specifically his attitude towards those who did not go along with the concepts of our discipline.

It has been several days now that I have watched the work of the battalion commander. I want to find the reason for his successes and at the same time to see that overexertion in work which people had spoken

of and I do not find it. The battalion commander works a full day but in no case "does he fall apart" nor does he complain about a lack of time. The others also work in the same manner, with a full load as I understand it, carrying out everything on time. It is not overexertion but a good businesslike fervor which is characteristic of the work of the battalion personnel.

Clebul, an ancient Greek philosopher, said long ago: "When one leaves home, let him think of what he plans to do and when he again re-enters the house let him think over what he has accomplished." It could be said that Lt. Col. Neob'yavlyayuchchiy stated Clebul's saying somewhat more precisely: "When you leave the house," he says, "it is already too late to think of today's affairs. Going home, think of what you are going to do tomorrow."



### GRAPHIC NOT REPRODUCIBLE

Photograph: Capt. N. Khotetskiy who is commander of one of the chasti in the Urals Military District's food supply service which works very well. Strict observance of the regulations as well as storage of food have allowed this service to gain one of the top positions in the district.

It is close to evening and close to the end of the established work day. We are in the battalion commander's office. He is always here at this time. Podrazdeleniya commanders and chiefs of services come in, one after another. In their hands they hold fat notebooks containing their daily personal work plans. The battalion commander examines the plan for the current day, checks how it has been carried out, approves the plan for tomorrow and, when necessary, adds corrections and additions.

The officer's personal work plan for the day is a simple thing. Everyone knows the value of timely and concrete planning and how much it provides. A businesslike and working rhythm appears, not only on a daily basis but during the course of the entire year. There isn't need for frequent and prolonged meetings and long speeches at the morning formation.

Lt. Col. Neob'yavlyayushchiy speaks of this again with the directness and sharpness so typical of him: "There is nothing worse than when an officer goes on duty in the morning without any idea in his head and without knowing in detail what he will do during the course of the day. Here he no longer controls the events but events control him and completely overwhelm him, depriving him of an opportunity to manifest initiative and perfect and develop something. It is very important to

teach officers to plan their work and the work of the podrazdeleniye or service. This should be not only for a day but with the future in mind. I remember a case; it occurred several weeks after I took over command of the battalion. I gave a problem to Capt. Trofimov. He was a young and very intelligent officer. There were the following problems: to set up a system for the centralized fueling of aircraft, barracks, showers; to construct a shelter, a heating plant and a shed and to winterize the equipment. Trofimov listened intently but looked uneasy. I set a deadline. I looked and saw that the officer had become completely gloomy. I asked what was wrong? 'Is it at all conceivable, Comrade Lt. Col. to do all of this in this period of time?' I said: 'Yevgeniy Aleksandrovich, try to plan it. Estimate when and what you will do and how many people and what equipment you will need.' Trofimov did just that. People began to work. Time passed and the plan was being met. Trofimov began to feel better. When everything was done he admitted: 'For a long time I did not believe that everything could be done in the allocated time. Now I am even somehow embarrassed.' It is not only the fact that the work was done," the battalion commander concludes his idea, "the individual gained faith in his strength and learned to use it intelligently."

When, a little over two years ago, Lt. Col. Neob'yavlyayushchiy took over command of the battalion, he was not faced with the question of how and where to begin: whether to untangle gradually and patiently this entire bundle of contradictions which were "leading" the battalion into the category of those lagging behind or whether to hack away at it. He was firmly convinced that where matters were below average he had to cut and to destroy everything that hindered the people in working better and with a greater return. In such cases what do they say about the leader? The new broom sweeps in a new way. Nikolay Mikhaylovich knew this, had heard it more than once and was not afraid of hearing it here because he knew better. In the end people would understand the correctness of these moves. Now they must believe in the will of the commander and in his boldness and resoluteness.

The commander's boldness is probably needed not only when he must jump on the breastwork and shout, "Follow me," and charge ahead of his men toward fire and death. Now also the commander cannot do without it during his day to day simple tasks. I cannot say when and how Nikolay Mikhaylovich acquired this quality and how he learned to get people to subject themselves to his will. Only various incidents from his biography as a commander come to mind.

...Neob'yavlyayushchiy as a young officer accepted command of the company. There were several among the new troops who were spoken of colloquially as "inveterate." From the very beginning the commander was not just strict with them he was severe. Everything occurred, both conversations and punishment. The conversations were brief, there was no need for explaining because the violators understood perfectly well. The punishment itself was severe. Order was reestablished in the podrazdeleniye. By chance the company commander heard a sentence spoken by one of those who previously believed that everything would continue as before: "Yes, this Sr. Lt. will let us have it..."

...The advanced courses had been completed. The supervisor for these, a general, offered Neob'yavlyayushchiy the post of battalion commander right here at the courses. "I thank you for your confidence, Comrade General, but it would be difficult for me to work here. There is a system established here over many years. In general it is not bad but purely local. I, on the contrary, have not only to do but also to remake." The general agreed, he understood the officer and did not take offense.

...All of the old roads had been dug up in the military camp and it was impossible to travel. The appearance of the garrison immediately

became unattractive. "What did you do Neob'yavlyayushchiy?" said one of the commanders indignantly. "You know that the commanding officer is about to arrive." Neob'yavlyayushchiy knew and the commanding officer arrived and saw the dug up roads. However, he also saw something else. He saw, in particular, how without being afraid the commander of the OBAT took on a given task boldly and resolutely. As a result at one of the routine sessions Lt. Col. Neob'yavlyayushchiy was offered the post of battalion commander which is where I found him at our meeting.

By mid-day the cold silvery sun had travelled a quarter of its path. Then somehow suddenly everything around was covered with a frosted sheet and it began to snow. The same kind of snow that adorns the bright streets of large cities on a winter night. The wind picked up and white liquid began to flow across the soil, scattering under the sprinkle of the snow flakes. They were moving more rapidly as if gathering speed in order to rise, wound up into tight braids and, breaking away from the ground, disappeared into the dark heights.

This is my last night in the camp. We sat in the hotel room with Nikolay Mikhaylovich past midnight. That evening I also found out about his passion for current literature and his long lasting interest in painting and its history.

He said, "Now, not to read every day is deliberately to doom oneself to dropping behind. Today the young men who join the army are such that in conversations about literature and art one cannot get away with silence or general thoughts. No, you must prove why you don't like the surrealism of Picasso and please be so kind as to explain how Van Dyke is weaker than Rubens. Any commander, if he so wished, can find time for reading."

I listened to Nikolay Mikhaylovich and somehow was glad for him. The man did not become stagnant and did not lose in the abyss of daily prosaic about the airfield, equipment and auxiliary enterprise esthetic receptivity and the ability to see beautiful things but on the contrary learned to understand more profoundly.

They say that an individual is particularly fortunate when, wandering along the zigzag of life's road, he finds that one task which everyday brings joy. Then it can be considered that the man searched for and found his calling. There were no sharp turns in the life of Lt. Col. Neob'yavlyayushchiy. Quite young, almost a youth, he became part of the OBATA and he has spent over 20 years in this troubled organization. He now believes that this is his calling. What is it like: close to the ground or something bright and vast? This question bothered me when I flew to the OBATA. Now I am on my way back. The tiny galaxy of camp lights moves away from the plane and melts into the darkness. Remarkable and strong people remained at the garrison. Here in the trans-polar area they carry out their difficult assignments. Their commander remained a man with a severe exterior and unsmiling eyes, who had become very dear to me. The answers to the question which bothered me before our meeting were now perfectly clear.

When the reader reads these lines, you, Nikolay Mikhaylovich, will already be in another garrison. Recently I heard of your new appointment. In such cases it is proper to congratulate one on a promotion, which I am doing with great pleasure. I received a letter from your old post. It describes your farewell party and states that you are often remembered and that for a long time you will be mentioned with a good word.

## MASTER OF GOOD SPIRITS

Dedicated to the excellent cook, Senior Sargeant reenlisted service Mikhail Mandrik, serving in one of the chast's of the Volga Military District.

It was raining. A cold wind was blowing,  
The soldiers were marching toward the front  
With full field gear  
Past the field kitchen.

Dawn will barely break  
When they will storm the height.  
The rockets have already with zigzags  
Crossed the darkness.

Mandrik was angry at the weather  
At the rain which poured down his collar,  
And at the same time, in passing,  
A jokester made a pun:

"Our respects to the cook,  
Don't get your chef's hat wet.  
We ask for shchi with fat  
And, of course, pepper and onion..."

Mandrik felt uncomfortable.  
He would answer but what's a kitchen?  
You cannot call it a rocket launcher  
Or cannon.

A cook too is an everyday affair  
By a kitchen, it's not like in battle...  
How Mandrik wished at times  
To change his profession!

He could bring up the sheels  
(He's nimble and broad shouldered)...  
And, if necessary...if necessary,  
To lay his bosom on the gunpost.

He sighed, not saying a word,  
He thought with downcast eye.  
"Yes, a cook, What is a cook?  
Is a cook not a soldier!"

He remembered: a hard winter,  
Haze -- one could not ride or walk.  
The field kitchen became stuck  
Halfway in the remote steppe.

The road is blocked completely,  
Snow as far as you can see.  
Mandrik became alarmed  
For those who were ahead of him.

"They are without bread and crackers,  
How is it in the fields without food?  
The soldiers I dare say curse the heavens  
And above all the cook..."

At once, placing the load on his shoulders,  
Mandrik was off on a distant



And unknown path. And towards him  
Arose the snow.

In utter darkness without a road  
It's not easy, from one snowdrift to another,  
The feet no longer listed to commands,  
Chills, fever.

The blizzard howls like a shewolf in the steppe,  
Here you may believe whomever you wish,  
How difficult it is to travel without a companion,  
How comfortless to be alone.

No longer has he control over himself.  
The entire body is chilled. I'll fall.  
Here I'll take off the load and sit down.  
No, I'll go! And, I'll get there!

Frost, And, snow in a constant curtain,  
To rest but that's not possible.  
What is that turning black there? A glade.  
In the snow a dugout and friends!

He dropped the load and squared his shoulders;  
Pressed by friends in a tight circle,  
He was greeted warmly and joyfully:  
"Our cook! Thank you friend!"

He brought them both bread and lard.  
He became chilled and exhausted on the way.  
But he smiled, although the fatigue,  
As they say, had him falling off his feet.

. . .

Forced to remember this occasion,  
The prankster who joked on the march,  
The howling clouds rained  
And the wind blew ever stronger.

Far away the dawn just beginning to gleam  
And the cook gazed intently  
How under the pots in a narrow flame  
The flame cast about and roared.

He again thought of the soldier,  
Storming the heights,  
Thought of as a comrade and a brother  
With whom he served and lived.

Yes, it was not easy for the soldier:  
Either rain or the oppressiveness of a battle.  
The height changed hands many times  
First to us, then to them.

Everything shuddered and resounded with noise,  
The height, the wood and steep bank.  
But the "nuclear blow" exercise  
Was successfully completed.

Suddenly the front was silent;  
The height was captured by the soldiers.  
And, here is the field kitchen  
And the cook at his post!

Perhaps he is not a central figure;  
But you'll not do without him.  
And the hazel eyes screwed up,  
Lit up with a warm smile.

Once more his pride  
Arose in him for his profession.  
The cook has a responsible position!  
He, like all the others, is always on duty.

The weather burst forth radiantly;  
The wind scattered the clouds...  
Mandrik noticed among the soldiers of  
The second platoon the prankster.

My compliments soldier,  
Are you tired out buddy?  
Wash up quickly  
And bring up your mess kit.

Both smiled afably;  
The cook straightened up his cap,  
Loosen your belt and try the shchi,  
And lowered the laddle into the pot.

At first the soldier blew on the spoon.  
Yes, the shchi with the fat is not bad.  
And, might even be a little better  
Than Dem'yanova's fish soup.

\* \* \*

I'll finish my tale  
With a plain but good expression,  
Thank you, our soldier cook,  
For your hard work!

## THE FIVE-YEAR PLAN OF THE MILITARY SOVKHOZ

Hero of Socialist Labor,  
director of Burnenskiy  
sovkhoz, P. Chigrinets

The first year of the five-year plan has ended. For us, the agricultural workers, it has been a remarkable one because in carrying out the broad system of measures for raising the efficiency of social production, as set forth by our Party, results were obtained for which all of our people can be truly proud. Last year, the sovkhozes and kolkhozes produced an extremely high grain harvest and significantly overfilled the plan of selling bread to the state.

Together with all of the village workers, the collective of our military sovkhoz also labored persistently achieving a further increase in the economic efficiency of the economy and raising the production of agricultural products for the troops. This is not easy to do under our climatic conditions. Great energy, persistence, a thorough knowledge, and high organizational ability is demanded of our people. Now, when the year has ended, it is pleasing to admit that the sovkhoz workers and employees, having successfully overcome many varied obstacles, achieved significant results. The sowing area, for example, of potatoes, the primary crop for the sovkhoz, was 1050 hectares last year. This is three times greater than it was five years ago. Since then, the average potato yield was raised from 70 to 220 centners per hectare, while the unit cost for a centner of potatoes decreased from 10 rubles 40 kopeks to 4 rubles 23 kopeks.

During the past four years, the fodder base which we established has permitted an increase in the average milk yield per foraging cow by more than 500 kilograms and a significant increase in meat production.

Last year was also remarkable for us because for the first time we compiled our own five-year plan. After a thorough study of the Directives of the 23rd Congress CPSU for the new five-year plan and an attentive analysis of the control figures, we held a production meeting. The participants at this meeting called upon the farming and animal husbandry specialists to develop and introduce suggestions on the individual branches of production so that we could compile our five-year plan on the development of our economy. Many responded to this request. A search for new potentials began.

Thus, the control figures we received were examined for possible increases. After a thorough discussion, the sovkhoz's five-year plan was approved at the general meeting. The workers and employees pledged to increase sharply all types of agricultural production. For example, it was planned to increase potato production from 11.74 thousand to 16.5 thousand tons and milk yield from 1,270 to 1,450 tons, etc. The plan provided for a 25-30% increase in productive labor, a decrease in unit cost by 20-30%, and have an annual income of not less than 325,000 rubles.

In order to bring the five-year plan to life, from the very first days it was not only necessary to make a rational use of the potentials known to us but also to seek new ones persistently. Such potentials were found and we put them into the service of the five-year plan. It is known that with high summer temperatures and dry air, seed potatoes degenerate over a 3-4 year period and lose their previous qualities. This factor annually causes us to bring in considerable quantities of seed materials from the northern regions of the country. The potatoes frequently become frozen during the trip, spoiled, delivery occasionally is delayed, the sowing period is extended, and product unit cost is increased.

Our searches for the possibilities of growing our own seed potatoes were finally successful. It seems, that in the Ala-Tau foothills there is good ground and no sweltering heat. It was only necessary to find water for irrigation. This difficulty was soon overcome also. With the hands of the able workers of the sovkhos: the tractor drivers, bulldozer operators, scraper operators, and others, a canal was built in the rocky ground and along the steep slopes and deep ravines in the mountains. The water was brought to the ground under cultivation. We obtained a rich harvest of seed potatoes from this sector last year. We believe that in the next few years, we will be able to support ourselves with our own products.

We are also doing much work in the selection of brands of potatoes most suited for our conditions, and which would be highly yielding, resistant to deterioration, and possessing good keeping qualities. Over a period of several years we tested 26 brands of potatoes. Brands such as Lorkh, Korenovskiy, Sedov, and Volzhanin recommended themselves. However, they still do not fully answer our requirements. Therefore, the tests continue and with great thoroughness. Favorable conditions have been created for this. Thus, if last year our economy had a sharp lack in mineral fertilizers, then we have a near sufficiency at the present time. Now, we require the field crop workers to have a sensible and intelligent approach to the use of the salts of fertility.

The work we began on studying the chemical composition of soils and on the compilation of chemical soil charts is continuing. We have given ourselves the task of bringing in fertilizer not only in relation to the presence of nutritive substances in the soil but also to the type of plant and the phase of its development. We also are studying the influence of such microelements on plant development as boron, magnesium, manganese, bromine, iron, and several others. The sovkhos's chemical laboratory is still new but has accumulated considerable know-how. This helps them make an efficient use of mineral fertilizers.

We give considerable significance to the diagram and density of potato sowing, the planting depth, the norms of tuber transplanting, and many other measures for raising the harvesting of this crop which is so basic and important to us. For instance, let us take the density of potato planting. This is not an unimportant condition. In order to have a stable potato harvest in the limits of 200-250 centners per hectare, it is necessary to achieve a plant density in the productive areas of from 50 to 60 thousand, and, in the seed sectors, from 65 to 75 thousand plants to one hectare with a transplanting norm of 3500 kilograms in the first case and up to 4500 kilograms in the second of graded tubers at a weight of 50-60 grams.

The proper execution of crop growing will permit us to resolve the fodder problem successfully. Correcting the errors of previous years and acting in the spirit of the decisions of the 19th (1965) Plenum of the CC CPSU and the 23rd Party Congress, we reestablished the sowing of alfalfa. In the past two years its was expanded to 3170 hectares. In the near future we are also planning to increase the sowing of peas, sugar beet fodder, corn silage and green fodder, and melon feed crops. The latter, together with alfalfa, sugar beet and corn fodder, permits the establishment of the proper green conveyor for the feeding of milk cows during the period the pasture lands become arid and also for the feeding of swine.

Considering that the further production of a number of food crops is being held back by a lack of seeds, our people are now concerned with the development of our own seed supply, and of corn in particular. Up to now we have been sowing the Uzbekistan edentoid variety for silage corn. This variety is distinguished by its growing height and by giving much greens. It ripens late, however, so because of this and the

early frost in the foothills of the region we do not always receive full-value earcorns. We are now looking for a variety which would ripen in time and would have good greens. We are also continuing the selection of other varieties of food crops.

It is known that the contribution of success in the development of field husbandry is a properly organized crop rotation. For this reason our specialists checked the crop rotation plan and gave attention to the errors of the past.

Field irrigation causes us many problems. Without water, it is impossible to produce a stable harvest each year. This is very clearly stated in the decisions of the May (1966) Plenum CC CPSU. Therefore much has to be done with the accumulation of spring and melted ice water, the search for new routes for the laying of irrigation canals and the delivery of water to the seeded areas, the struggle with water filtration in the irrigation system, and the development of watering methods. The system used in the sovkhoz of the first two waterings made through the furrows permits a decrease in the watering period, decreases water consumption, and avoids excess soil packing. With this, soil aeration and the vital activity of soil microorganisms increases.

All field irrigation measures are supervised by the chief agronomist of the sovkhoz, P. Golovko, and the hydrotechnician, S. Vakulin. They are the ones who did the work on locating the route and heading the construction and equipping of the irrigation canal to the seeded sectors, which was discussed above. Even now, after compiling the five-year plan for the development of our economy, they are concerned with improving the irrigation system.

In this field the problems are great. In five years we have to conquer an additional 800 hectares of irrigable land, face 61 kilometers of canals in the inside irrigation net, build 400 concrete water cutlets and 1200 sluices, dig three ponds, lay water pipelines to the pastureland, etc. The water for the sovkhoz is destined not only for potatoes and vegetables but also for meat, milk, and bread.

Our five-year plan also takes into account the prospects for increasing animal husbandry products. There is much to be done. But we are firmly convinced that all of the tasks will be carried out. The pledge of this is the availability of qualified animal husbandrymen cadres, sufficiently good livestock, and a stable feed base. A further increase in horned cattle productivity will be resolved by the introduction of a rational feeding of the animals, the selection of the best animals according to production qualities, the careful cultivation of young tree stands and the execution of other zootechnical measures.

Swine breeding holds a significant place. This branch of animal husbandry will be expanded even further. At the present time we have developed and are introducing a system of measures which will ensure a better feeding of swine in large groups (up to 600-800 head) primarily in the summer when pasture crops are available.

During the winter we feed the swine with hay meal made from alfalfa, it constitutes up to 20% of the daily ration by calory content.

Decreasing product unit cost and raising economy profitability is unthinkable without a well established economic activity and a constant analysis of productive work. We have convinced ourselves in this from experience. The economic commission, created in the sovkhoz, periodically analyzes the work of the individual production branches and organizes discussions of the data received at production meetings. All of this is useful. Now we are persistently searching for the most rational way of handling our economy and shifting it to a full self supporting

basis. With this goal, we hope to organize the economic training of administrative leaders and specialists.

Having critically examined the shortcomings and weighed all of the possibilities, our workers expressed many suggestions for improving the sovkhos's productive activities. All of this made our work of compiling the five-year plan for the development of our economy that much easier. In this plan we provide for a further organizational and administrative strengthening of the sovkhos and an improvement in agronomy and the zootechnical activities. We are planning for a fuller use of mineral and organic fertilizers, for carrying out the agricultural operations promptly and in a qualitative manner, for the search for additional water sources for land irrigation, and for a broad introduction of scientifically based methods of water usage for irrigation.

The construction of many living, cultural and public usage, and production buildings is planned. We expect to mechanize many of the arduous processes and increase the accumulation of organic fertilizer by more than 1.5 times. A system of measures has been developed for the protection of agricultural crops against pests, sickness, and weeds, for improving water supply to the fields, protecting them against flooding and salinization, and the mastering of new irrigable lands. We hope to bring about a major planning effort for the fields, bringing water to the pasture lands, and many other measures. The plan is a large one but a realistic one.

Where do we encounter difficulties? First of all, it is in the mechanization of the arduous tasks. Thus, the potato harvesters and other potato harvesting machines do not justify themselves in our heavily pebbled and mixed soils. They bring considerable mechanical injury to the tubers and make them unusable for storage. Consequently, it is frequently necessary to harvest the potatoes manually. We need a potato harvester which could operate under our conditions. Here is a wide field of activity for designers and scientific workers. Now take the feed distributors; they are cumbersome and not very efficient. The loading of potatoes into wagons is poorly mechanized.

We also have a great need in building materials. They are issued to us from a centralized point and in small quantities. So that the economy would grow and expand, we need to have new depots, shops, cow barns, pig sty's, living quarters, and cultural and public usage buildings. The construction work which we are conducting is lagging behind production growth. We are awaiting help from the Food Supply Directorate of the Ministry of Defense.

Although we are concerned with production planning and labor organization in our economy, we always remember the people. They are the ones who decide the fate of the plans. This is why the party, komsomol, and trade union organizations are educating the field and farm workers in a high political consciousness, with the feeling of the landlord for his lands, in collectivism, friendship, and mutual assistance.

We make wide use of socialist competition. Workers and employees of teams, brigades, sections, and farms participate. Furthermore, we also compete with neighboring military sovkhoses. The competition totals between the stock breeders and farms are summarized monthly, and on the completion of each type of field cropping activity for the field crop workers. The competition results are published in leaflets, military pamphlets, and wall press, as well as in the rayon and oblast press. The agitators also discuss them at meetings. The winners are presented with pennants and challenge Red Banners, with honorary certificates and valuable presents in a ceremonial state.

Undoubtedly, political-educational work strengthens productive



discipline, facilitates the growth of productive labor, and the economy's commodity output and profitability. It is no wonder that for four years now the sovkhos has retained the challenge Red Banner of the Ministry of Defense USSR and the Central Committee of the agricultural workers and employees trade union as well as the challenge Red Banner of the Military Council of the Turkestan Military District.

The successes of the economy are the result of the selfless effort of the entire collective. Wonderful people work for us. Here is one of them.

Boktayev Musropbek came to the sovkhos in 1955. Previously he had been a sheep herder and knew nothing of crop work. Being an inquisitive and hard working individual, he gradually became a master potato planter. In 1962, Boktayev was in charge of a team and obtained a potato harvest of 150 centners per hectare from a 70 hectare area. This first success was just the beginning. In 1965, his team gathered 302 centners of potatoes per hectare from a 101 hectare area. For his conscientious work, M. Boktayev was awarded the title of Hero of Socialist Labor in 1966. Now, many people from the sovkhoses and kolkhoses of Kazakhstan come to learn from him. He has many worthy successors and students. Thus, the former members of his team, Ye. Chirchikbayev and A. Tatekov began to catch up with their teacher. In 1965, Tatekov's team gathered up to 330 centners of potatoes per hectare, while Chirchikbayev's team has already been twice awarded VDKh medals. In 1966 the teams of Boktayev and Chirchikbayev competed against each other. They took on the high obligations of gathering an average of 300 centners per hectare from 100 hectares. The yearly totals indicated that their deeds matched their word.

There are many conscientious workers in our economy. They are raising community wealth with their efforts. We are fully convinced that our sovkhos's new five-year plan will be fulfilled with high indices.

СЕРВАНК НАЛ ИТ. СООНОЦИГЕ

## FOR THE SOLDIER'S TABLE

Captain N. Mel'nichuk

The mercury column of the thermometer stopped at  $-18^{\circ}\text{C}$ . Cold. The tall pines stilled in the grip of the hear-frost. We took a few more steps and found ourselves... in the "subtropics". The thermometer shows a reading of  $+20^{\circ}\text{C}$ . All around it is clear, grass, flowers, and succulent fruits. This is the hot house of a chast' of the Moscow Military District. Here, in May of last year, they gathered nearly a ton and a half of cucumbers. Part of the harvest went to improve the messing of the soldiers, part was given to the post exchange dining room. They also gathered the same amount of tomatoes. Onions grew particularly well in the hot house.

"We gathered four tons," we were informed by Master Sergeant reenlisted service I. Shokgol'kov who is in charge of the hot house. "We hope to gather even more this year. Not only onions, but also tomatoes and cucumbers. And all of this in the same area. We," he continued, changed our agricultural practices, established new feeding composts which helps for an intensive vegetable growth. Diligent care for the plants and the know how of growing them is beginning to have its effect. Vegetables are a great help in improving the messing of the soldiers. Now, fresh vegetables are available to them throughout the year. The men are very happy, and so are the cooks.

The fact that a hothouse has been built in the chast' is a commendation for the Command. It located the means for using local effort, without detriment to service or training, to construct the building, lay in steam heating, and organize care for the plants. This was done without any great material expenditures. The hothouse has fully paid for itself in its first year of operation.



GRAPHIC NOT REPRODUCIBLE

## ORGANIZING THE MESSING OF ROCKETEERS

Colonel G. Kurkin

Rocketeers... They are the one who occupy the forward positions in peacetime. The complex and latest equipment and the constant combat readiness demands that the men have good special skills, general and technical intelligence, high moral qualities, and very good health. This is why a special approach is needed to the questions of the welfare and messing of the personnel.

A full-value and rational messing combined with a well thought out system of physical training and rest helps maintain the health and work capability of the soldiers, sergeants, and officers. So it is not accidental that considerable attention is devoted to this in the rocket podrazdeloniya. For example, the servicemen working with rocket fuel are provided with preventative medical items. These same products are issued to crew personnel during duty days.

Other measures are also carried out which are directed toward improving the messing of the rocketeers. A good material-technical base has been created in the majority of the chastis: modern standard officer and soldier dining rooms have been built, along with food warehouses, vegetable warehouses, fixed refrigeration installations of various capacities, and kvass making points. In view of the climatic conditions, icehouses and cooled warehouses have been built in a number of places. The large capacity of the depots and warehouses permits the maintenance of prescribed food stocks in the chastis in the needed assortment. The problem of providing the troops with fresh vegetables, potatoes, and meat throughout the year has been worked out; fresh fish is now issued more frequently.

As it has already been mentioned, the rocketeers constantly stand a combat watch. This is why it is necessary to be concerned with the messing of duty shift personnel. The industrious hands of the soldiers and sergeants have created the necessary comfort and maintain model orderliness in the dining rooms and at the launch positions. The soldiers speak with love about their soldier dining rooms which are headed by reenlisted service Master Sergeant Marchenko, Junior Sergeant Mart'yanov, Senior Sergeant Belyayev. Many of the officer dining rooms are kept in good order. There they prepare varied snacks and hot dishes, hot and cold drinks, and varied pastries. The feeding regime is established in accordance with the work regime of the duty officers.

The commanders, political workers, and supply and service personnel devote particular attention to the messing of night duty shift personnel. This is accomplished in the chastis by means of a sensible distribution of the basic ration and the addition of products obtained from the kitchen gardens and those obtained from the chast' fund.

Special tables are set aside in the dining rooms for the duty shift personnel and they are fed first. In individual cases, when it is permitted, the duty personnel are messed in another location where the food is delivered in small size thermoses.

Additional messing at night is not only afforded the combat teams but also the remaining duty personnel of the podrazdeloniya: diesel operators, firemen, communicators, soldiers standing duty at the traffic regulating points, and others. This messing is well laid on in one of the rocket chastis. The products are obtained from the kitchen garden which has cows, swine, egg-laying chickens, hares. A rich vegetable and potato harvest is gathered annually from the gardens.

Much effort has also been exerted in another chast'. The men

lovingly care for the gardens, care for the animals, and grow tomatoes, watermelons, and muskmelons. The milk yield is so high that it supports the planned requirements. It is issued as additional nourishment for the soldiers.

It has now become commonplace in the chasti to have a special issue on holidays of meat, milk, and fruit dishes, meat pies, pastries, and buns.

Much has been done to improve the messing of the rocketeers and there is still much more to be done. But, unfortunately, there still are those commanders and military quartermasters who do not properly approach the questions of messing. Therefore, in some areas there are violations of food norm expenditures, do not correctly replace fresh products with dry, and poorly organize their storage and preservation. There are serious shortcomings in the technology of food preparation. For instance, it would seem uncomplicated to arrange weight control over the products after they have been cold and heat processed. This, however, is not done everywhere.

There are also problems with food preparation and some of it stemming from a lack of the full utilization of dining room implements. The reason for this is that some of the food supply service personnel are poorly acquainted with use and repair of these implements, also, spare parts for the mechanical units are not available. As a result, the equipment at times is inoperative because some small part has been broken. It is not so simple to have them repaired in the district shops.

The dining level is not where it should be in all places. The soldier dining rooms are not always provided with forks, plates, and teaspoons, and sometimes the plates have not been properly washed.

A few words about the washing and degreasing of plates and dishes. This is not an idle question. It has a direct relation to the prevention of gastrointestinal diseases and, thusly, a direct relation to the health of the servicemen. In some chasti, however, the aluminum plates and dishes are poorly washed and infrequently cleaned, and frequently are placed on the tables before completely dry. It is not so difficult to resolve this problem. We believe that to do this it is necessary to purify the aluminum plates and dishes chemically. This is done in the following manner. For 10-15 seconds the aluminum (stamped) plates and dishes are processed in a potassium hydroxide liquid bath (100-150 grams to a liter of water) at a water temperature of 75-95° C. Then they are washed off with warm water and placed for 5-10 seconds into a sulfuric acid solution (100-150 grams per liter of water) with potassium bichromate at a water temperature of 15-20° C. After this they are carefully washed and dried. The chemical processing must be conducted in a special area outside of the dining room, ventilated, and under the supervision of the doctor. All operations are done only in enamelled containers and with safety precautions taken. The processed plates and dishes become clear and sparkling. They stay this way for a long time.

To do this work in the chasti, they must be provided with chemicals, degreasing and washing facilities, for which there is a great need in the troops.

The weak point in the work of the food supply service is the professional training of specialists, particularly among the junior ranks. Therefore, some cooks do not properly know and follow the rules of food processing, the norms for issuing prepared food, meat and fish portions, the water norms and periods for cooking the products. This can be aided if the training of the rear soldiers is conducted right at their places of work. The basic method of cook training must be control and demonstrative cooking. It is best to plan them according to individual meals

with a consideration for the preparation of the more complex or newer dishes.

The food supply workers have an honorable and responsible position. The quality of personnel messing depends to a considerable degree on their effort, skill, initiative, and resourcefulness, and this means, the attitude and health of the military rocketeers.

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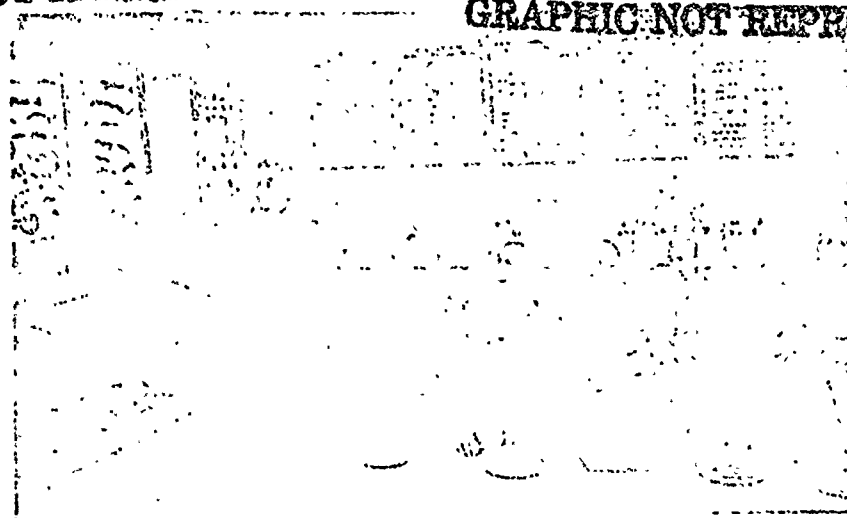
## TRAINING OF MILITARY COOKS

A. Saykov

The great volume of knowledge on the principles of the science of commodities of food products and the preparation of a wide assortment of meals requires a scientific approach to the training of the cadres. This task has been successfully solved in the military schools for cooks. The photo story, made by our correspondent, A. Saykov, in one of these schools in the Ural Military District, describes the life and study of the young soldiers.

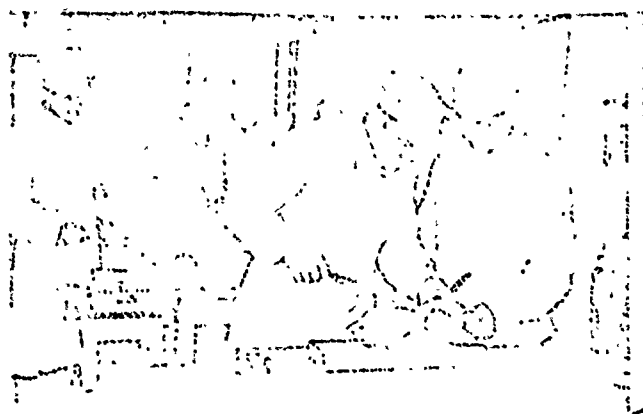
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Study in the class on the technology of preparing cold snacks is conducted by cook-instructor Master Sergeant reenlisted service A. Mishchuk.

The principles on the theory of culinary art are presented by experienced cook-instructors. Locally made moulages, diagrams and aids help the students to acquire a more thorough study of culinary theory. The students have practical studies in the kitchen classrooms with the technology of production and with kitchen equipment of modern military mess halls. Here, under the supervision of a cook-instructor, the students develop practical skills in the use of technological equipment for the preparation of more than 300 dishes.



Cook-instructor Master Sergeant reenlisted service I. Tikhonov in the kitchen classroom conducts a course on the technology of preparing hot dishes.

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Serious attention in the training of young specialists is given to field training. The rapidity in the preparation of meals combined with outstanding quality is the basic task facing the students.

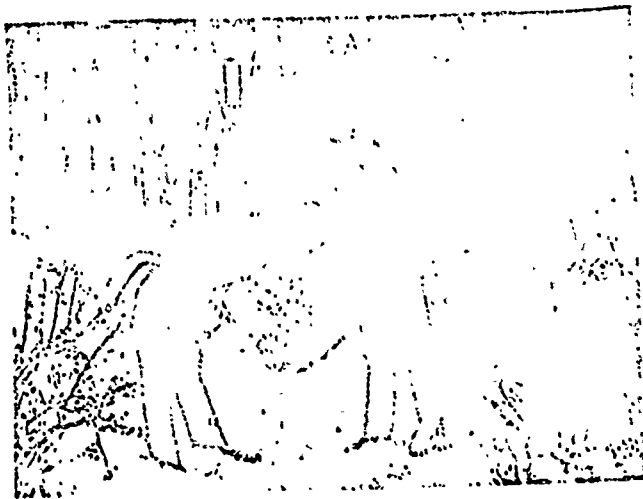


Along with intensive training, the political-indoctrination work and organization of soldier free time is well worked out at this school. Frequent lectures, discussions, studies in various circles, chess tournaments and various sports measures help the young soldiers in carrying their service. In just five months, a new detachment of military cooks will leave the school and join the chasti of the district.



GRAPHIC NOT REPRODUCIBLE

The students of the military school for cooks prepare dinner for tank personnel during exercises.



These must be "walruses": (left to right) Private A. Yut, A. Boldarev, and S. Sidyakin daily begin their morning wash up with water and snow baths.

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## AN IMPORTANT STIMULANT FOR NEW ACHIEVEMENTS

Major General Medical Service  
G. Vilyunov,  
Lt. Colonel Medical Service  
Yu. Boyman

Many new methods for the service and treatment of the sick have been introduced into the medical institutions of our district. In particular, the scope of surgical intervention has been expanded including complex lung and heart operations. The level of service for the sick has been raised. Administrative work has improved considerably.

The medical service achieved all of this, to a considerable degree, due to socialist competition and the movement for communist labor which has encompassed all personnel of our hospitals and medical institutions. The hospital, where the chief is Kh. Snakhch'yan, is an example of the favorable effect that socialist competition has had on the state of affairs of any collective. This collective carries the high title of collective of communist labor and retains the challenge Red Banner of the Military Council of the district.

The pledge of success in the development of competition is, primarily, the constant and firm supervision by the command element and the party organization of the hospital. Here, all of the communists are active fighters for the fulfillment of accepted obligations. By personal example and outstanding work, they draw the entire collective behind them. At one time, the party organization wrote the following into the decisions of the meeting: "To attain that all of the communists would earn the high title of shock workers of communist labor." Now it can be told that this decision was fulfilled. The hospital leaders, using the strength of the collective, ably direct socialist competition toward the solution of the main tasks. For instance, take Kh. Snakhch'yan, the chief of the hospital. He has a sensitive and attentive attitude toward the people, knows how to reach their very best qualities and inculcates in each a feeling of pride for their treatment institution. He always counsels with the party, komsomol, and trade union organizations.

Much attention is given in this treatment institution to the advertising of competition results. A council has been formed in the committee consisting of representatives of the command element, party and komsomol organizations, and the local committee, and it controls the fulfillment of obligations by the personnel, and reports its conclusions and suggestions to the chief of the hospital, the party bureau, and the local committee of the chast'. Here they make use of varied forms of propagandizing the achievements of the leading personnel, organize local radio broadcasts, and publish wall press and information leaflets. An Honor Board has been set up, discussions are held on the experience of the shock workers of communist labor. Upon completion of the winter and summer training periods, the totals are summarized on the results of socialist obligations. These are usually discussed at the general meeting of personnel.

The achievements of the outstanding hospitals and their know-how is quickly becoming the attainments of other treatment institutions of the district. The exchange of delegations has become firmly entrenched in our practice. Neighbors become acquainted with each others work, exchange thoughts on questions of treatment and administrative activity, and organize socialist competitions. Foremost experience is exchanged; it becomes better introduced. After the visits, the delegations, as a rule, report to their collectives, demonstrate photographs, amateur motion picture films taken during the trip, and models or sketches of rationalizer improvements introduced in the neighboring hospital.

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delegation representatives describe the leading individuals and their work experience, and what should be introduced in their own hospital. In conclusion, a stand entitled "At our friends" is set up.

A working contact with other collectives and a study of foremost experience, not from paper but directly on the spot is a useful measure and facilitates the development of competition between the hospitals. Thus, during the visit to the hospital where the chief is M. Levin, the chairman of the local committee of another hospital where P. Martynukhin is the chief, L. Basov stated the following:

"It would be good for us to test our strength, to conclude an agreement on socialist competition and to see, in a year from now, who carried out their obligations best."

"Why not do this?", responded B. Shpak, the secretary of the party bureau of the neighboring hospital.

The suggestion was supported by all those present. The principles of the agreement included an improvement in treatment work and administrative activity, and in the constant perfection of professional and political knowledge of the hospital personnel. Socialist competition strengthened from day to day. For instance, if at first officer A. Yerukhimov had a sceptical attitude toward such competition because of the difficulties of making its summaries, he later understood the great force it brings out in him. He ably directed his personnel and moved his section up into the ranks of the outstanding. It has truly earned the honorable title of collective of communist labor.

A year went by. Commissions from the hospitals, with the participation of representatives from the medical section of the district and the political section of the garrison's special chast' compiled the summaries of the socialist competition. The results showed that there was a noticeable improvement in treatment and administrative activity of the hospitals, a sharp decrease in work discipline infractions, the level of service to the sick increased, and losses in material goods were eliminated. During this same period, amateur artistic collectives were organized which began to give concerts not only for the sick, but also for the men of the garrison. Combat and special training plans were carried out with a rating of "good" and "excellent". New methods for the service and treatment of the sick were introduced. Complex biochemical and serology research has been mastered. Many nurses have learned related specialties: operating room nurses, anesthesiology assistants, clinical laboratory workers, plaster-cast nurses, methods workers in physical therapy, and functional diagnosis office nurses. They have their own donors who, when necessary give blood to save the lives of the Soviet warriors.

Fulfilling the obligations for a sensible expenditure of medications and bandages has given a good savings. Health faculties have been established in the Officers Houses of the garrisons and the hospitals' doctors actively participate in them. Moreover, each doctor read not less than two lectures on medical subjects in the chasti. The nurses and nursing aides, having taken on the obligation to give free duty amounting to 12 hours by sick bedsides, successfully fulfilled them.

Rationalizer activity grew out of the competing collectives directed toward improving the treatment and diagnostic process. In carrying out socialist obligations, the hospital administrative personnel achieved high indices in economic work. Because of the good conditions and attentive care, they were able to preserve potatoes and vegetables until August and reduced the natural loss of these products practically to naught. Through the kitchen gardens, more than two tons of meat, six tons of potatoes and two tons of vegetables and of greens were given

to the state. A 5% savings of the yearly consumption of fuel, electric power, and water was achieved. The collection of scrap metal was fulfilled by 110%. Grass has been planted and flowers, started in the greenhouses have been planted, and rest zones for the sick have been created.

Socialist competition did more than improve the treatment and diagnostic work and provide a savings in state means, most important it inculcated the people with confidence in their own ability, raised their feeling of responsibility for their assigned work, gave birth to a feeling of pride in their medical institution, and welded them into a friendly and work capable collective.

The experience of the socialist competition of two hospitals teaches us that there where the command element and the party organization seriously and in a business-like manner supervise the competition is where we find the greatest successes in work and the treatment and administrative activity is best established.

Socialist competition between hospitals has now found a great distribution. Moreover, it is now going out beyond the district. Agreements are now being concluded on socialist competition with the hospitals of other districts.

Competition in honor of the 50th Anniversary of Soviet rule is assuming a particularly wide scope, as well as in honor of the Armed Forces and the 100th anniversary of the birth of Vladimir Il'ich Lenin. These are characteristic examples.

Responding to the call of the men of the air force chapt', the collective of the hospital where Yu. Oshorovskiy is the chief, on the initiative of the party organization, took on increased socialist obligations in honor of these wonderful dates. An outline plan was developed. The party meeting at which it was discussed, took the following decision: mobilize the personnel through all forms and methods of party and political activity for a qualitative fulfillment of the plan for a further improvement in treatment and diagnostic work and administrative activity, and enter the ranks of the foremost medical institutions of the district. They also decided to struggle to ensure that the requirements of the moral code for the builders of communism would become the norms of conduct for each officer, worker, and employee of the hospital; to ensure that by the 50th anniversary of the Great October Socialist Revolution, the hospital would have not less than 60% shock workers of socialist labor.

The plan provides measures for improvements in the special and political training of personnel and scientific subjects planned for development were noted.

A special section is devoted to preventative treatment work and the contact between the hospital doctors and the troops. The plan also includes tasks for improving the nourishment of the sick and the maintenance of good welfare conditions in the wards.

Just a short time has gone by since the increased obligations were accepted but we can already talk about the first successes. The hospital received a good evaluation at one of the recent field exercises. The success in mastering the basic methods of heart operations. Six scientific tasks have been fulfilled. An 8,000 ruble in the savings of state money has been obtained through the active participation of all of the personnel. Military and work discipline has improved. A large detachment of shock workers of communist labor has been created. The hospital is fighting for the title of collective of communist labor and is competing for one of the first places in the inspection announced by

the Military Council of the district for the best medical institution.

All personnel are taking part in this important work and each individual demonstrates initiative, resourcefulness, and gumption. It is no wonder that Yu. Osherovskiy, chief of the hospital, was awarded a personal watch by the Minister of Defense USSR, leading surgeon I. Sichkaruk was awarded the honorary title of "honored physician RSFSR", and many workers were commended in orders issued by senior officers.

The initiative of this hospital has been picked up by other medical institutions of the district which have also initiated socialist competition in honor of the 50th Anniversary of Soviet rule, the Armed Forces, and the 100th Anniversary of the birth of V. I. Lenin. The recent decree of the Presidium VTsSPS, "On improving the organization of socialist competition", was of great significance in this work.

The workers of the district medical service, having entered into socialist competition, are increasing the level of medical service to the warriors and the members of their families, are honorably fulfilling the tasks which have been set before them.

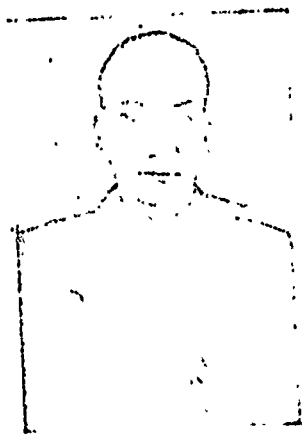
## HONORED PHYSICIAN OF THE REPUBLIC

Lt. Col. D. Yanshchikov

The chief of the ophthalmology section of the hospital, Lieutenant Colonel Medical Service Fedai Akhmetovich Saymanov came home late at night. He dined, rested, and, as usual, began to study the medical literature. He had just started reading when the telephone rang:

"A very sick person has been admitted. A vehicle has been sent for you," the duty doctor informed him.

Saymanov has had more calls of this kind than he can count. At any time of day or night he is ready to go out to help the sick. Few minutes had ticked by.



Lt. Col. Medical Service F. Saymanov

Feday Akhmetovich examined Private Sen'ko at the hospital and ordered an immediate operation.

It was very late at night when the physician left the operating room. He was very tired but had a joyful feeling of satisfaction, everything had gone well, the soldier would see. Equally happy for their colleague were his assistant doctor, Polina Mikhaylovna Larik and the operating room nurse Valentina Il'inichna Syas'ko.

Feday Akhmetovich spent the rest of the night in the hospital personally watching over the condition of the patient.

Dr. Saymanov has given more than 17 years to his favorite work. He was a medical aid man during the war and he carried many soldiers with their arms from the field of battle. Even then he had the desire to become a physician. After the war he completed the medical academy specializing as a surgeon-oculist.

Not only military doctors, but also the doctors from civilian polyclinics and hospitals come to Fedai Akhmetovich for help. He always gives them good advice and practical help.

Outstanding knowledge, great experience, and a sensitive and attentive attitude toward people has helped Saymanov to win prestige and love. He also receives warm letters from school children and former patients. "I cannot find the words to express my feeling of thanks for returning my sight to me," writes a student of the medical institute, Pvt. (reserve) Vasilii Blokhin. "I, like you, have decided to devote my life to the medical profession. To be like you in every way -- this is my dream, and I will realize it."

Here is one of the many comments in the record of impressions.



"On leaving the hospital, I consider it my duty to write a few words of thanks to the medical personnel of the section. I entered the hospital with a severe trauma to the eye, there was a real threat to my vision. Here, an operation was quickly performed. The attention and sensitivity of the medical personnel, particularly the chief of the section, Dr. F. A. Saymanov, was gratifying. My eye and vision were saved. I am being discharged confident and in good health. I will never forget such wonderful people. Baraushkin."

Fedai Akhmetovich is an active social worker. The hospital section which he heads has now held the high title of collective of communist labor for the third year.

For his great services in the work of preserving the health of the Soviet fighting men and for the constant assistance to the civilian medical institutions, the Presidium of the Supreme Soviet of the Kazakh SSR has awarded Fedai Akhmetovich Saymanov the honorary title of "honored physician of Kazakh SSR."

## WITH COMMODITIES FOR A REMOTE GARRISON

Lt. Col. Quartermaster Service  
V. Kuznetsov

The workers of the trade and welfare enterprises of the Ural Military District devote considerable attention to carrying out the planned tasks of commodity turnover. The commodity turnover plans anticipate a thorough servicing of military contingents, particularly the remote garrisons where the requests for food and industrial goods must be fully satisfied. Our main task lies in this.

We have set up a special fund for the remote podrazdeleniya. The workers of our district delivery exchange are building their activity on the principle of a more rapid and better quality of service to these remote garrisons. Their trips are made according to a strict schedule, they accept industrial and food requests. This form of trade work is actively being introduced by the post exchange chief, V. Savinova, who frequently visits the podrazdeleniya and studies the requests of the servicemen. The Minister of Defense awarded her a valuable gift on Worker's Day.

Post exchange chiefs L. Berdinskiy and M. Gredyakin give solicitous care to the needs of the population of remote garrisons. Among the leaders of the delivery exchange is M. Glinskikh who is also the driver of the travelling store. Courteous and attentive, this man of initiative is well acquainted with the requests and needs of the servicemen and their families. M. Glinskikh looks upon the servicing of the soldiers who are out on exercises, in camps, at the firing ranges, and those who are serving in remote garrisons as a combat mission. It is no wonder that in the last year he has received five commendations from the Command.

Other examples of the conscientious fulfillment of obligations by the tradespeople can be given. The residents of the remote garrisons greet them as privileged guests. Mass visits were made last year to such garrisons of the Ural Military District and hundreds of thousands of rubles worth of food and trade goods were sold.

The numerically small and remote garrisons are visited by travelling vehicle shops in addition to food and trade goods also carry books -- the constant companions of our soldiers, officers, and their families. We have also activated a book store founded on social beginnings. The books are delivered by special travelling book stores to public distributors, kiosks, and libraries.

The part-time exchanges have justified themselves in garrisons of this kind. The wives of servicemen work in these stores. They sell essential goods for the soldiers and officers. The turnover is 2-4 thousand, sometimes more, a month. As a rule, the goods are delivered once a week, by request, by means of passing transport. Goods are reserved for them at the post exchange depots by the date of delivery. We have just recently established this type of exchange and now, having studied them, we have come to the conclusion that under the given conditions this is the best form of post exchange. This year we are thinking of establishing similar exchanges in all of the remote garrisons.

It is not easy for the exchange workers to organize sewing of military and civilian clothing. You would not open a dressmaking and tailoring establishment in the taya or steppe for a small podrazdeleniye. But everyone needs shoes and clothing. At first, we sent experienced cobblers and garment workers out to them. But we encountered this difficulty -- the highly qualified specialists wasted a lot of time in travel. Their income decreased and the enterprise's plan was always in

danger of being disrupted. It was necessary to change this system. We have now established travelling reception points. They accept orders and turn them over to major shops and dressmaking and tailoring establishments for execution. This form of servicing has justified itself.

But it would be incorrect to assert that we have fully solved the problems of the trade and welfare servicing of remote and numerically small garrisons. Unfortunately there still are some shortcomings and some are serious ones. We are constantly working to eliminate them. But not everything is in our power. Thus, the lack of certain commodities does not allow the full satisfaction of consumer demands, and we particularly refer to childrens items. Moreover, childrens clothing is not manufactured in attractive fashions and comes in pale colors. There is a very difficult problems with womens and childrens shoes. We are not able to provide our consumers with modern fashions in either summer or winter shoes. Many justified complaints occur as a result. As we know, packaged food commodities are the most convenient for the delivery trade. But, unfortunately, we receive too little of it.

A few words about our travelling shops. They are the foundation in the organization of trade for the remote and numerically small garrisons. Without them it would be impossible to meet the demands of the military consumers. Their roadability, however, is so low that during the spring and fall thaws they sit inactive in the garages. Even worse, they cannot be allowed out over dirt roads even after an ordinary rain. It also happens that the goods are available, the travelling shops are available but the consumers have to wait for a long time for the roads to dry out.

In addition, the travelling shops manufactured by industry are poorly equipped and it is difficult to set up good trade conditions. We feel that it is about time to manufacture specialized travelling shops for the food trade, trade goods, and the book trade.

The post exchange workers of the district have entered into the competition for a worthy meeting of that wonderful anniversary -- the 50th Anniversary of Soviet rule and the Armed Forces. They are full of desire to work even better and provide a fuller satisfaction of consumer demands. There is no doubt that with the appropriate assistance of the Main Trade Directorate of the Ministry of Defense they will fulfill their obligations and will significantly improve the trade and welfare service to the servicemen and their families living in remote and numerically small garrisons.

## TIME DICTATES

Lt. Gen. N. Levchenko

The discussions which have arisen in the journal following the publication of the article by comrades A. Sheremet and F. Burlachuk, have touched upon many questions of military logistics without whose solution its further improvement is impossible.

It is known that financing of billeting service expenses is made through estimates of the Ministry of Defense according to several articles. Each refers to a specific form of allowance and ensures the payment of the costs of communal services, fuel, barracks inventory and furniture, and the maintenance of buildings and facilities. This firm regulation on material expenditures holds back the sensible initiative of the chasti' commanders. Thus, if the payment for electric power and the purchase of light bulbs would be made according to one article rather than by two as it is now done, then the commander, within the limits of allocations, would be able to purchase inexpensive luminous lights compensating for their purchase by means of the savings gained from electric power. The same is true for fuel. Its expenses, paid for by one of the articles, could frequently be reduced through the use of gas. To do this, it is only necessary to acquire the devices for its burning. It is not so easy to do this. The purchase of heating devices is made by yet another article (we are not talking here about major expenses).

It seems to us that it would be most sensible and economically advantageous to have all expenses in billeting allowance to be handled by one article with consideration given to number of personnel, the cubic size of the buildings, and the technical outfitting of the chasti'.

Now about communal services. In recent years, various engineer facilities structures have been erected in order to improve troop welfare in the military posts. This, in its turn, has demanded the organization of their proper maintenance and repair. However, the practice of planning and financing these operations does not permit supporting all of the sites with preventative maintenance. The point is, that the established plan of repair set in estimated figures considerably exceeds the actual chasti' financing. Such a system presupposes the use of cost free labor locally obtained.

Military chasti striving to fulfill the plan frequently do only the simplest of work (painting of premises, road repair, etc.). But the repair of boiler rooms and electric power plants, water mains, sewer and central heating, and structural elements of the buildings which require qualified workers is done on a lower scale.

It seems to us that the maintenance and financing plans must be the same. This will permit a better utilization of the construction-repair organization potentials.

One more comment on the billeting service. It is necessary to improve the provision of the troops with furniture, that is, raise it in the chasti to the prescribed norms. The lack of necessary furniture has a significant detriment to the welfare of the personnel and results in having some of the quartermaster personnel make their furniture which does not conform to the established models.

The article under discussion has suggestions concerning the clothing supply service. In particular, once more the question has been raised on unifying and improving the design of ground troops clothing. One cannot disagree with this suggestion, it is essential that it be realized. We fully support comrades Sheremet and Burlachuk that there

should be a systematization in the issuing of clothing to officers and reenlisted personnel, a faster shift over to a biannual issue of clothing and a triannual issue of footwear. It is difficult to agree with some of their recommendations, however. They suggest, for example, that the cost of officer military clothing per year should be established and that within the limits of this sum the servicemen should be authorized to order articles he needs. It would seem that this system is not acceptable because it can complicate the planning by the clothing supply service and result in the deterioration of officer appearance.

Undoubtedly, providing the officers with uniforms must be differentiated according to climatic conditions and service nature. Since all of these features are difficult to determine from above, we believe that they should be considered locally. In so doing, all changes in the supply norms must be within the cost limits of authorized gear.

Further. The authors suggest that the cotton jacket should be removed from supply and replaced with a suit comparable to a tankman's suit. The majority of our district's servicemen are opposed to this. And rightfully so. The cotton jacket is not a special item but an upper uniform article which is worn with all distinguishing insignia. It cannot be mixed with special clothing. If it is taken from supply then the greatcoat, especially in the cold regions will not live out its wear life. This will bring about a sharp deterioration in the appearance of the serviceman. It is another matter that the cotton jacket's design should be improved and that it should be manufactured from cloth of a higher quality.

The authors touched on several problems concerning the messing of personnel. For example, they suggest that the soldier dining rooms be shifted over to an orders system. A good thing but, it seems to us, ahead of time because the potentials have not been established for it: there are too few plates and dishes and, mainly, the dining room staffs are not set up for this type of work. If this system is acceptable, it is only there where the number of people is low. But in order to improve the messing of the soldiers and sergeants now, there should be an expansion in the assortment of products issued out as the soldiers ration and increase control over the quality of food preparation by the commanders, political workers, quartermaster personnel, and doctors.

The article correctly sets the question of increasing the authority of the chasti' commanders in the expenditure of non-budget funds. For example, by using them it is possible to acquire plates and dishes for the soldier dining rooms. We believe that such purchases should not be made in the trade organizations (in order to prevent a wide variety of dishware in the chasti) but from purveying agencies through the district depots. In order to do this, the district should have a dishware purchase fund. It is wise not to be everything but just specific items. In general it is very important to decrease the operating life of forks and spoons, unify dishware and improve its quality.

It would not be bad if the officer independent dining rooms working on a self-supporting basis would be provided with products from the chasti' depot at the expense of the users. This would simplify accounting and storage of products and would decrease the cost of officer messing because the products could be sold at wholesale prices. One cannot but agree with the article's authors on the need to improve the training of auditors attending military training institutions and especially the rear officers in the matter of logistics. It is necessary to do away with the break between the high requirements for the skills of the military quartermaster personnel and the order of their training. Only intelligent people, well versed in their work are capable of handling modern logistics and especially its constant improvement.

## LIFE DEMANDS

Guards Captain Quartormaster  
Servico V. Lesnichiy

The article by Lt. Gen. A. Sheremet and Maj. Gen. F. Burlachuk raised some very important questions which await solution. As the chief of the clothing supply service of a chast', I wish to express a few comments.

The issuing of clothing articles is a very arduous task. The authors correctly suggest that this should be done twice a year: in April and October. What will this give? First of all, it will permit a better supplying of the personnel with prescribed items by height and size; reduce cloth remnants and article surplus to zero. This system will permit a better preparation for the issuing of uniforms and shoes, establish better control in the podrazdeleniya over the presence, use, accounting, and preservation of clothing.

About the supply norms. It is difficult to agree with the authors when they suggest that officer clothing costs be determined on an annual basis and that within these cost limits they would be able to order those articles which they need. To my point of view, this would worsen the appearance of the servicemen and would result in great complications in accounting.

Further, I would suggest the elimination of service trousers from the supply norms of line chast' officers and their replacement with service trousers worn inside the boot since practice has shown that in the line chast' trousers are infrequently outside and trousers worn inside the boot alone would not be sufficient for wear life. There is a way out of this situation -- introduce parade trousers which are worn inside the boot. The same can be said about the field bags issued to officers and reenlisted service personnel. If the element officers: platoon, company, and battalion, are rarely ever separated from it and it soon becomes unusable, then many of the reenlisted personnel have absolutely no use for it. It seems to me that the corresponding corrections should be introduced into the article issue supply norms.

A few words about accounting. It has been simplified recently. But it still remains cumbersome. The suggestion expressed in the article on centralized accounting in the chast' is extremely important. But in order to bring it about, qualified clerks and bookkeepers are required. Now their training is the concern of the chiefs of services. To our point of view it would be expedient to train them in the junior specialist schools of the rear services. What happens: no sooner do you train a clerk, and it takes no less than a year to do so, when another one has to be found because the former is to be discharged into the reserve. I believe that there are two solutions for bringing order into the accounting: either centralize it on the chast' level as suggested by comrades Sheremet and Burlachuk or else provide the services, particularly clothing and food supply, with hard working reenlisted service personnel.

Accounting must be simplified, made convenient and effective. At times much time is spent on the filling out of documents. For instance, in order to issue and accept boots for the chast' personnel, more than 75 invoices have to be filled out. Why not do this on the basis of two registers, incoming and outgoing. As we can see, the difference is a large one: two documents versus 75.

Much time is also spent on the accounting of clothing articles issued to officers and reenlisted personnel. Articles issued to them are accounted for in account ledgers and cards. A register to write off



the article is compiled when wear life is completed. It would be sensible to list this article only in the accounting card and the write off in the ledger be made only on the basis of expenditure documents. Since these items become the property of the officers and reenlisted personnel the supplying of these categories of servicemen need not be indicated in the accounting and to require only the necessary in the wear life of lacking articles.

Order and improvement is required in providing articles of clothing for reenlisted service personnel as they are transferred from chest to chest. They are issued so many items that at times it is difficult to carry them all. Can it not be done so that the soldiers or sergeants would depart for their new assignment only with items of primary need? These are -- parade uniform, greatcoat, jacket, hat and cap (regardless of the season), belts, footwear, one-two pairs of summer underwear, two sets of cotton uniforms (work and service), one or two towels, and a barracks bag. Additionally, this kind of order will also facilitate the work of the podrazdeleniya sergeant majors, the clothing supply service specialists, and will decrease loss and waste of articles.

A few words about the soldiers uniforms. Quite frequently one hears these complaints: it hampers movement, it's too hot in the summer. In my service I have frequently encountered cases when the soldiers and sergeants are more eager to be discharged in their cotton uniforms. The time has come to think about an open uniform.

## TRADE WORKERS CONFERENCE

Col. (Reserve) S. Skryabin

An All-Army conference of chiefs of trade directorates of military districts, fleets, and groups of forces was held; it was devoted to advertising the summaries of the trade and welfare servicing of the troops in 1966 and the tasks for 1967. A report was read by the chief of the Main Trade Directorate of the Ministry of Defense USSR, Lieutenant General Quartermaster Service P. V. Kochetkov. He mentioned that in 1966 there was a continuation of the further improvement in military trade and that the trade net was expanded and made more attractive. Model trade and welfare enterprise installations were established in nearly all of the military districts and fleets and their know-how was used for improving the work of the entire network of stores, dining rooms, and common services enterprises.

Much has been done toward improving the quality of messing and reducing its cost, raising the level of service and improving the sanitation and technical condition of the officer dining rooms. As a result, more than 70% of the dining rooms are technically well equipped and can be used as an example in the organization of service for officers and their families. The network of officer cafes, organized on the base of the best dining rooms is ever expanding. Conditions have been established for the young officers to spend their free time in a cultural way.

A greater and greater use is being made of travelling common services facilities. Special mobile common services buses are now in operation in a number of districts; they have two barber seats (one for men and one for women), and one area for the cobbler. In 1967, the Main Trade Directorate of the Ministry of Defense will conduct the testing of new mobile shops which will have a sewing shop and working areas for a watchmaker and a photographer.

Many chiefs of trade directorates of military districts and fleets spoke at the conference with fundamental criticisms and self-criticisms on the shortcomings in military trade, and used a number of valuable suggestions directed toward the successful completion of the tasks facing the post exchanges in 1967.

In conclusion, Colonel General F. M. Malykh, the First Deputy Chief of Rear of the Armed Forces, made a report in which he set the concrete tasks for improving the trade and welfare servicing of the troops.

## VEGETABLE WAREHOUSE WITH ACTIVE VENTILATION

Engineer Major A. Medvedev

The press has frequently commented on the great prospects of the vegetable warehouses with active ventilation. Each year such warehouses become more and more common both here in our country and abroad. They are already being used for the storage of potatoes in the southern and central regions of our country, in the Baltic area, in the Ukraine, in Moldavia, and other republics.

They are being introduced into the military chastl, but, unfortunately, not intensively enough and primarily in the construction of new ones or with the major overhaul of old vegetable warehouses.

The active ventilation system brings great benefits: the loading of products into the vegetable warehouses increases by more than one-third and storage losses are decreased. Moreover, because of the rapid drying of the tubers processed during rainy weather and the rapid healing of mechanical damages and the maintenance of the necessary storage state, the quality of the potatoes remains high for a long time.

The experience of the civilian organizations and the military chastl confirms that the future in potato and vegetable storage belongs to the major warehouses with active ventilation. Therefore, the quicker such vegetable warehouses will be introduced into the military economy, the better will be the quality of the products, the lower the losses, and the higher the economic efficiency of storage.

In connection with this, we will demonstrate with a concrete example how to reequip a vegetable warehouse with natural ventilation into one with an active ventilation system.

The active ventilation system is a chain of canals for blowing outside air through the potatoes, beets, or other vegetables (figure 1). It consists of a shaft for sucking in the outside air, a fan, the main channel, distribution channels bringing the air under each bin, and specially equipped bins.

In the reequipping, it is useful to select a fan with the required productivity, select a place for its installation, lay out and lay the main channels, set up the gates (dampers), determine the cross-section and select the design of the grilled channels under the bins.

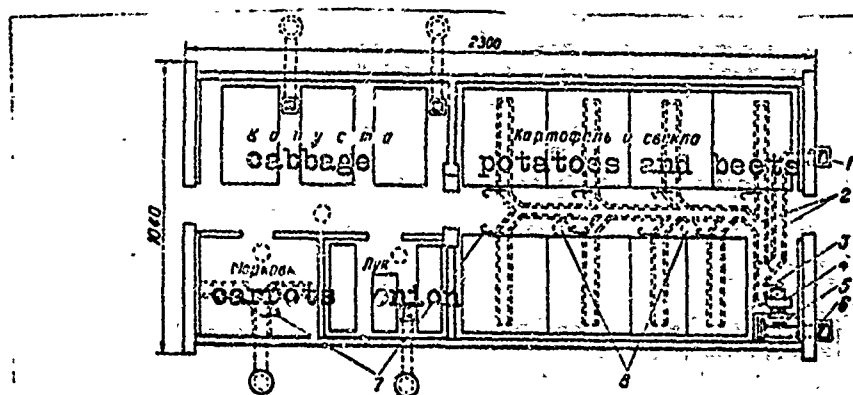


Figure 1. Plan of a vegetable warehouse with active ventilation: 1 - air exhaust shaft; 2 - subfloor channel; 3 - thermometer; 4 - fan; 5 - air intake chamber; 6 - air intake shaft; 7 - metal throttle; 8 - TsAGI deflector.

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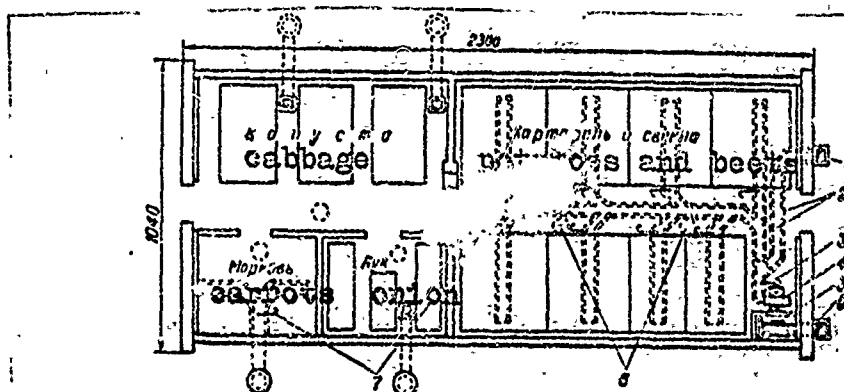


Figure 1. Plan of a vegetable warehouse with active ventilation: 1 - air exhaust shaft; 2 - subfloor channel; 3 - thermometer; 4 - fan; 5 - air intake chamber; 6 - air intake shaft; 7 - metal throttle; 8 - TsAGI deflector.





In order to remove air from the vegetable warehouse, it is desirable that TsAGI deflectors be installed on the exhaust pipes instead the hoods and they can be opened and closed by means of a system of blocks and tackle. The exhaust pipes must be open when outside air is brought into the warehouse.

The main and subfloor channels are placed underground; they are built from red bricks on a concrete foundation (10 cm). They are carefully plastered after this with a brand 50 cement solution and the tops covered over with concrete slabs or thick boards. It is recommended to cover the outside walls of the channels with asphalt.

The vegetable bins (3.5 x 4 m) are made from well fitting boards with a latticed flooring and a closed subflooring, made of wood, at a height of 15-20 cm.

The height of the bin depends upon the type of vegetable stored and the height of the building itself. It is recommended that the bin for potatoes would have a height of 3-4 meters and 2.5-3 meters for cabbages.

The cross-section of the ventilating channels is computed by a simplified method which we can examine on the example of reequipping a warehouse for potatoes with a capacity of 150 tons.

Fan efficiency for this amount of potatoes is as follows:

$$150 \times 50 = 7500 \text{ cubic meters per hour}$$

or

$$\frac{7500}{3600} = 2.08 \text{ cubic meters/second.}$$

The No 5 Ts4-70 fan with a 1.7 kilowatt electric motor, at 1420 rpm, has approximately this same efficiency.

The cross-section of the basic channel is computed as the quotient obtained from dividing the fan efficiency by the speed of the air moving in it, which must be from 4 to 6 m/sec.

With an air speed of 5 m/sec, the cross-section of the basic channel is  $\frac{2.08}{5} = 0.4$  square meters. We select the channel dimensions at 60 x 65 cm. In order to equalize pressure along the entire length of the channel, we narrow it at the end by one-third (40 x 45 cm).

The general cross-section of the distribution channels bringing the air up under the bins (potatoes, beets, cabbage, or other products) must be equal to the cross-section of the basic channel at its beginning.

Consequently, if the warehouse has 8 bins, then 8 channels will have to be installed with a cross-section of  $\frac{0.4}{8} = 0.05 \text{ m}^2$  (20 x 25 cm).

In order to ensure a strong enough air pressure entering into the lower layer of potatoes, the cross-sections of the distribution channel openings in their totality must not exceed the total cross-section.

For example, if we will have five openings, then their area will be  $\frac{0.05}{5} = 0.01 \text{ m}^2$ .

We use an opening size of 10 x 10 cm. In order to reequip a medium capacity vegetable warehouse (for 150-200 tons of potatoes), 2.5-3 thousand bricks, 6-6.5 m<sup>3</sup> of brand 200 concrete, and 1.3-1.5 m<sup>3</sup> of cement solution will be required.

The cost of materials and construction-assembly work in the laying of the ventilation channels will be approximately 350 rubles, while the purchase of the fan and its installation is valued at 300 rubles (including the cost of a fan with an electric motor -- 83 rubles).

Thusly, the cost of reequipping the vegetable warehouse will be about 650 rubles.

The experience of operating a vegetable warehouse with active ventilation has shown that overall potato losses for the duration of the entire storage period decreases by 3-4% on the average. Consequently, in comparison with the common method of storage, the savings for 150 tons of potatoes (at a cost of 60 rubles for 1 ton) will be:

$$\frac{150 \times 3}{100} = 4.5 \text{ tons, or } 4.5 \times 60 = 270 \text{ rubles.}$$

In this way, the expenses for reequipping the vegetable warehouse will amortize themselves, just through a decrease in losses, in a matter of 2-3 years.

The expenses incurred with the consumption of electric power by the operation of the fans (from 2 to 5 hours a day) will be insignificant. Thus, if we assume that the fan operates approximately 3 hours a day for a period of 10 months, then the cost of the electric power will be some 25-30 rubles a year. These expenses will be more than covered if we eliminate potato sorting (because there is no need for it with active ventilation) which costs 100-120 rubles a year. Moreover, because of the decreased loss in potatoes from spoilage, their quality is improved and less are thrown away during processing.

The active ventilation system may be used not only for the storage of potatoes and beets, but also for carrots, onion, and cabbage. Thus, cabbage losses by using active ventilation is decreased two times, and that of onion is three times.

We will comment in conclusion that the reequipping of vegetable warehouses provides a very high efficiency in the southern regions, and especially in Central Asia and the Caucasus where there are very great temperature drops during the day. Consequently, by having such warehouses equipped with active ventilation, it is possible to maintain optimum conditions for the storage of potatoes and vegetables without the use of artificial cooling.

## TRAFFIC CONTROL BY THE METHOD OF ESCORTING COLUMNS

Sr. Lt. V. Karlyuk

This type of traffic control may be used when escorting columns (not more than one motor transport delivery company) along individual routes of march. It requires a particularly careful reconnaissance and intelligence of the routes of march.

After clarifying the task and the route of the column, the commander of the traffic control podrazdeleniye studies the route on the map paying special attention to mountain pass areas and notes routes by-passing cities, large populated points, bridges, and major water obstacles. Furthermore, he marks off the preliminary placement of posts, the column halt areas for regrouping of traffic control personnel. If the time for executing the task does not permit a reconnaissance of the route, map work is sufficient. But to do this, the traffic control podrazdeleniye commander will need 2-3 hours to study the column's route of march and the preliminary placement of the traffic control service on the map.

The experiences of exercises held in a group of forces indicated for escorting a motor transport company column, it is necessary to have, as a rule, one GAZ-69 vehicle, four motorcycles, and 9 traffic controllers. However, the amount of traffic control forces and means is determined not only by the column composition but also by the features of the route and can be established only after map or on the spot reconnaissance and its study.

Traffic control by the column escorting method is executed by sectors with the column halted in order to move the traffic controllers forward. The column moves in the following order: the GAZ-69 with the traffic control podrazdeleniye commander, the motorcycles of this podrazdeleniye with traffic controllers, the vehicle of the motor transport delivery company, followed by the column of vehicles with their freight and the follow up maintenance vehicle. The traffic controllers are set out on the route directly from the march, without stopping the column.

In order to facilitate placement of the posts, the GAZ-69 should be equipped with an additional red light in the back having a separate switch on the dashboard in front of the commander's seat. The lighting of the light is a signal to the immediate following motorcycle to set up a post according to the situation. The red light considerably facilitates communication between the traffic control podrazdeleniye commander and the traffic controllers.

After controlling the traffic, the controllers are usually moved by motorcycle into the column just ahead of the rear maintenance vehicle. After all of the traffic controllers have been set out, the traffic control podrazdeleniye commander halts the column at the designated point. A traffic controller is posted to prevent movement of oncoming transport. This must be done in order to ensure safe passage for the motorcycles to overtake the column which after stopping and without any additional commands move up to the front of the column.

The exercises held have shown that the requirement in forces and means in traffic control by the column escorting method is insignificant (a 180 kilometer long march with five displacements of traffic controllers required only 9 persons while the support of this route required the full complement of a road traffic control company); there is no need for the traffic control podrazdeleniye to have its own radio equipment since communications within the column are conducted by the radio means of the delivery company; it is possible to react quickly to a changing situation without an additional displacement of traffic control means;

the traffic control podrazdeleniye does not require a kitchen or tent equipment; its messing is provided by the motor vehicle transport company.

This method, however, does have some drawbacks -- the halting of the column for a short time (up to two minutes) and the need to have well trained traffic controllers who are capable of carrying out their duties without a preliminary statement of the tasks and selecting the traffic control point and conforming with the situation. But to our point of view, those negative facets can be eliminated during combat and special training and especially by making certain improvements in the methods of conducting columns and to ensure that as the columns go by the traffic controllers would overtake them. To do it this way would eliminate the need for the column to halt so that the traffic controllers could regroup.

## MORNING INSPECTION

Engineer Major V. Medvedov

"Company, fall in for morning inspection", is the command which the company duty officer gives every morning in each podrazdeleniye.

After this command, the deputy platoon commanders and the squad leaders hold the morning inspection under the supervision of the sergeant major. Its purpose is to check the presence of the people, their appearance, and how they observe personal hygiene rules. Periodically during the week, on days designated by the company sergeant major, the state of the men's shoes and uniforms is checked. This inspection is conducted to reveal defects in the clothing.

Conducting the morning inspection properly is not a simple matter. The experience of many of the podrazdeleniya sergeants major indicates that good results are obtained by those who plan the order of the inspection ahead of time. Daily, after the evening muster they, together with the sergeants, summarize the totals, note the positive and negative facts in the life and well-being of the soldiers, and give orders for elimination of the defects. In conclusion, the company sergeants major announce the plan for the morning inspection. A great effect is obtained from this organization of morning inspections.

The sergeant major must instruct the deputy platoon commanders and the squad leaders how to conduct the morning inspections correctly since these help inculcate the men with the habit of careful wearing of the uniform and in a strict observance of personal hygiene rules. The morning inspection is an actual means for checking the preparedness of the podrazdeleniye personnel to carry out the commander's instructions.

During the inspection, the company duty officer writes down the names of those requiring medical aid in the medical inspection register and sick list to direct them to the medical point of the chest.

The Interior Service Regulations require that each serviceman would always be in uniform, cleanly and neatly dressed. It obligates the soldier to wear his shoes and clothing with care, to repair it accurately and in time, to clean it daily and keep it as required.

In inspecting appearance, a check is made of the proper state of the uniform, its pressing, cleanliness of the neck cloth -- the first three buttons of the jacket are unbuttoned for this, for buttons, the correct attachment of the shoulder boards, collar tabs, emblems, and other marks of distinction. The soldier's handkerchief must be shown in opened form. The observance of personal hygiene by the soldiers is also checked: hair cut, shaved, cleanliness of the neck, arms. The legs, footcloths, and undergarments are checked periodically, usually just before taps. In inspecting the breeches, an examination is made of the front halves, the belt, seams, straps, trouser belt and its loops. In examining the footwear, an inspection is made of the boot tops, toes, tops, soles, heels, and backs.

In inspecting the upper clothing, attention is given to ensuring that the sleeves are sewn on securely, as are the cuffs, straps, hangers, hooks, and loops, and that the pockets and lining are not torn. During the inspection, the accessories are checked for completeness, polish, and proper wear, and packing of the barracks bag.

Each soldier must have two needles and white and khaki (or black) colored thread. The needles must be kept on the left side of the garrison cap or under the visor of the winter cap.

Following the morning inspection, the squad leaders order that the detected defects be corrected and report on the inspection results to the deputy platoon commander who in turn reports to the company sergeant major.

Minor uniform repair is not complicated and each soldier (sailor) can do them independently in the common services room of the podrazdelniye. For example, uniforms may be repaired using polyvinyl chloride glue (paste containing 40% polyvinyl chloride tar and 60% dibutyl phthalate) or BF-6 glue. To do this, patches or ripped seams are smeared with the paste (glue) and pressed with a hot iron. Preparation of the polyvinyl chloride paste does not require any special knowledge and can be done by any soldier.

The servicemen enter into exercises only in uniforms and footwear in good condition.



## YOU ARE ANSWERED

The journal readers frequently turn to the editors with various questions. Today, at the request of the editors, some of them are answered by the Clothing Supply Directorate of the Ministry of Defense.

Major V. Ananich: upon receiving promotion to the next regular rank, can the materials obtained by the junior officer norm be replaced with cloth authorized for senior officers with payment made for their cost difference?

Answer. According to existing regulations, cloth for the tailoring of military uniforms are issued by quality according to military rank on the day of issue. It is not permitted to replace this cloth at the depots of the military chast. However, senior officers are not prohibited from wearing uniforms tailored from materials issued to junior officers.

Engineer Major V. Simonovskiy: may a chest emblem for completing a military academy be obtained to replace one which was lost?

Answer. According to existing regulations on chest emblems for individuals who have completed military academies or military faculties, new emblems are not issued in the event the original has been lost or damaged.

Captain Ye. Agafonov: may the clothing depot carry shelf tags?

Answer. The guiding references on the accounts and records do not provide for shelf tags at the clothing depots of military chast.

Lt. Col. Solovoychik: is it feasible at the present time to make arm emblems or bands for duty personnel not from red material as prescribed in the Interior Service Regulations, but from some polyamide material with prepared inscriptions? Cannot such arm bands be centrally provided to the military chast through the clothing supply service or the post exchanges?

The Clothing Supply Directorate of the Ministry of Defense is developing a method of placing letters and drawings of synthetic film material for placement on cloth. The first test models of sleeve insignia for specialty designation for sailors and petty officers of the Navy made from polyvinyl chloride film have been made. These models will receive practical testing and, if required, additional work on them will be performed under production conditions. If the test results will be positive, then it will be possible to use synthetic films to place inscriptions on arm bands. It is not feasible to make arm bands with the inscriptions made wholly from polyamide film materials (caprone, anide) because these materials are not sufficiently resistant to temperature changes and light.

As far as the possibilities of a centralized supply of arm bands to the military chast is concerned, this question can be resolved only after troop testing of the test items with inscriptions (drawings) made from synthetic materials.

## STUDY AND EXPAND THE THEORY OF MILITARY ECONOMICS

Professor, doctor of economic sciences, Major General A. Korniyenko

The Soviet socialist state has entered into its wonderful fiftieth anniversary. Not one country in the world has so consistently and persistently championed the cause of peace in the world as our state. By its very nature, aggressive wars of aggrandizement and policies of the enslavement of people are alien to it. But history has so unfolded itself that twice our government has had to enter into mortal combat with international imperialism.

The Second World War decisively undermined the position of world capitalism and preset the outcome of the historical struggle of two systems in favor of socialism. But it did not destroy the roots which give growth to war. Today, peace is being threatened by the ventures of the imperialists. The CPSU Program states that "The imperialist camp is readying the most odious crime against humanity -- a thermonuclear world war which can bring unbelievable destruction to entire countries, the slaughter of entire peoples."

The period in which we are living is remarkable in its great advances in the development of productive forces, of an unbelievably rapid technical progress and revolution in military affairs. This period is characterized by a collision of complex tasks and interests. Politics, economics, technology, military affairs, and science have set up many difficult problems and have brought forth a considerable number of the most complex contradictions.

One such problem is that of the knowledge of the contradictions on the essence of modern war. The Soviet government makes no secret of the fact that it is constantly strengthening its defenses, is demonstrating unweakened concern on the most feasible employment of all forces and means to ensure victory over any foe.

The Soviet government has been given the lot of the complex task of scientifically developing and practically solving all problems of modern war. As in all spheres of knowledge and human practice, Marxism-Leninism has armed the Soviet people with an understanding of the rules of war and of armed conflict. Military science is successfully developing in the USSR and is encompassing the entire circle of questions on conducting armed conflict, military art and strategy, and the military-economics science.

V. I. Lenin, the genius of the socialist revolution, stood at the cradle of Soviet military and military-economic science. At the beginning of the 20th century, V. I. Lenin analyzed the experience of the Russo-Japanese War and drew important conclusions on the changing character of modern war. He indicated that the peoples began to conduct war, that massive armies originated employing the latest weapons systems and the latest in military equipment, that the military organization of the country has molded into its economic and cultural order. V. I. Lenin wrote: "The contact between the country's military organization and its economic and cultural order has never been as close as it is at the present time."

V. I. Lenin developed the fundamental theoretical positions on whose basis Soviet military-economic science was developed and the military economy of the Soviet government was formed during the civil war and the Great Patriotic War.

The positions of V. I. Lenin on the decisive significance of the economic organization of the country, on the unity of the fleet and the

near, on the conversion of the country into a single military camp were the basic principles in the Communist Party's solution of the theoretical and practical questions of the military economics of the USSR during the Patriotic War. The ideas of V. I. Lenin brought forth a flight of creative military thought. They developed, and became firm and enriched on the basis of the new historical experience and the development of military affairs as a whole.

Published during 1920-1930 were the wonderful works on military problems by M. V. Frunze, the work of B. Shaposhnikov The Brain of the Army, the work of M. Tukhachevskiy Questions of Modern Strategy, the book of V. Triandafillov The Nature of Operations of the Modern Army, of P. Karatygin General Fundamentals of Mobilizing Industry for War Needs, of P. Lobelev State Defense, of M. Savitskiy The Economics of War, etc.

During the Great Patriotic War and in the post-war years, the Soviet military thought took a giant forward stride. Relying on the decisions of the Communist Party on the questions of military building and a further strengthening of our country's defensive might, Soviet military science and military-economic science solved and continues to solve the ripening problems of modern war and military economics.

The theory of military economics has taken its rightful place in the science on war. Its significance has increased because modern war has placed the most complex tasks before the national economy whose solution is unthinkable without the scientific development of many economic problems.

The first of these problems is economic readiness for war. The appearance of nuclear and thermonuclear weapons has opened new horizons for strategy. It has become possible to solve strategic tasks of war in the shortest time frames. In this connection, the problem of economic readiness for war has also become a new plane.

It should be emphasized, first of all, that in a modern war, should it be unleashed by the imperialists, the problem of the economic potential of the country will be particularly significant. But the growth of the economic potential is a condition of the country's economic readiness for war and also its capabilities. The essence of the problem is that of converting the capability into reality, into the real factors of the military might of the country. The national economy must support strategy economically, that is, to be capable of rapidly solving the strategic tasks of war. This can be obtained through a high level in economic readiness for war. Readiness for the country's defense presupposes a high mobilizing readiness of the national economy. Economic mobilization is the process of the realistic utilization of the economic potential of the country in the interests of its defense.

In this manner, military economics, as a science, is concerned with the study of the problems of the country's economic readiness for war. By its nature, this problem is a strategic one. Here is the real contact existing between the theory of military economics and strategy. Since the important questions of modern war become filled more and more with strategic content, primary significance is assumed by the question of expanding the mental outlook of the military cadres, by having them master the basic categories and understanding of strategy. Strategy has ceased being the Latin for the uninformed, even as Marshal B. M. Shaposhnikov wrote at the end of the 1920's.

In researching the economic laws of modern war, the theory of military economics is wholly concerned with concrete economic problems. The military might of a country lies in its armed forces, in the degree to which they are outfitted with the most effective weapons systems and military equipment, in the capability to replenish the losses and to

increase its forces. Under conditions of intensive technical progress and the continuing revolution in military affairs, the solution of this problem is pushing against specific boundaries created by the possibilities of economics. The limitations of the economic resources of any country sharply raise the significance of the economic effectiveness of the expenditures for military needs; the expenditures for research and testing operations, for the production of various weapons systems, expenditures concerned with increasing material reserves and their storage. Here we have the problem of valid optimum calculations, economic modeling and quantitative analysis. The scientific processing of these questions is a task of the theory of military economics. In this sphere, the theory of military economics is inescapably abutted with a number of concrete economic branches of industry and transportation.

A further stage in the comprehension of the economic laws of war is that of researching the reverse effect of war on economics. Armed effect on the enemy's economy and ensuring maximum invulnerability of one's own country's economy has become one of the basic tasks of strategy. The economy of a country has become one of the decisive "theaters of war" and has taken a new burden on itself.

An extremely complex and contradictory problem has arisen before national economy: the apportionment of tremendous resources for anti-air and antirocket defense of the country, its protection against chemical warfare means, for civil defense. Here, military economics collides with the necessity of finding a comprehensively founded decision which would answer the requirements of armed conflict and the capabilities of the country's national economy. It is difficult to over-evaluate the significance of the theory of military economics in researching the problems of the so-called "economic war".

The theory of military economics cannot be indifferent to the study of the capabilities of probable enemies. It is fully concerned with researching the economic potential and the questions of economic mobilization, the questions of the economic support of the defense, the economic efficiency of the weapons systems of the probable enemies.

The theory of military economics would not fulfill its designation in relation to military science if it would not study its enemy. In the sphere of military economics, as in other spheres, a sharp struggle and competition of two systems is in progress. This struggle dictates its own objectives, frequently inexorable conditions, without whose consideration, all of the theories and calculations can turn out to be built on sand. The theory of military economics does not exist solely for itself; it serves the achievement of victory in war, it provides initial data for military science, for the practice of economic support of war and the country's readiness for defense.

As in all other sciences, a sharp uncompromising struggle is in progress between two inimical ideologies -- socialist and bourgeois; between two opposing military economic sciences -- bourgeois and Soviet. The American imperialism has mobilized a huge detachment of specialists developing the problems of the economic preparation of an aggressive imperialist war. In the interests of this preparation and to fool the people, the theory is propagandized exalting the imaginary economic and military superiority of the United States, the actual military and economic strength of the USSR is undervalued, and proving the relative ease of victory.

One of the tasks of Soviet military economic science is the criticism and unmasking of the inimical bourgeois military economic theories and views. "The struggle against bourgeois ideology must, under any conditions, be uncompromising, as this is a class struggle, a struggle for man, for his dignity and freedom, for strengthening the position of socialism and communism, this is a struggle in the interests of the international working class."

Theoretical research encompasses a wide circle of military economic questions which are being solved by the agencies and services of the Armed Forces rear. If we can so express ourselves, the Armed Forces rear should be considered as a singular drive belt from the country's national economy to its armed forces. All material supply for the troops, supporting their combat operations, upholding the normal vital activity of the military organism in peacetime and in war is levied on the shoulders of the Armed Forces rear. It solves many problems concerning the economic efficiency in the utilization of means, their rational placement, storage, and other questions. Without a theoretical processing of these questions, the Armed Forces rear would not be capable of ably connecting the solution of current problems with the statement and intelligent solution of the prospective goals of the readiness of the Armed Forces for anything.

All types and branches of the Armed Forces have military logistics. Its functions in peacetime and wartime. On its condition depends the combat readiness of the troops and their health and welfare which, to a significant degree, determines the political and moral state of the troops. Under the conditions of a continuing revolution in military affairs, the significance of military logistics has strengthened immeasurably in connection with the complexity of the material life of the troops. The questions of organizing military logistics, the economic effectiveness in employing the forces and means also requires its own theoretical comprehension and generalization.

The officers serving in the various rear services of the chasti and podrazdeleniya of the army and navy are faced with great tasks in the sphere of a further improvement in the organization of military logistics and the correct solution of the economic problems arising in them. This group of workers of the rear services, solving the practical tasks of the material and technical support of the troops, more deeply and thoroughly become aware of the ripening questions of the economic life of the troops and the requirements of their theoretical comprehension. Therefore, it is very important that the officers of the rear services be included in the active theoretical development of the questions of the economics of military logistics. This will strengthen the possibilities of scientific-theoretical research and will bring great usefulness to our common matter.

Consequently, the theory of military economics encompasses a wide circle of questions. These are the questions of the economic readiness of the country for defense, studying the economic laws of conducting war and armed conflict, especially the questions of armed action against the enemy's economy and ensuring the survivability of our own country, questions on the economic effectiveness of introducing and producing weapons systems and military equipment, and questions of the economics of military logistics. The entire sum of these questions are differentiated, isolated, and concentrated in individual scientific disciplines -- military economics, the economics of the defense industry, the economics of military logistics. But all of them are closely interrelated, connected with military science, strategy, operational art and tactics. Thus, military economics, exploring the common laws of war and armed conflict seem to form the economic base of strategy. The economics of military logistics supports the immediate operations of the chasti and podrazdeleniya. All of these scientific disciplines are oriented on Soviet military doctrine which weds strategy and determines the bases of armed conflict, the concepts of the character of war in the developing situations, the readying of the country for war and the employment of the armed forces in defense of the state, the most improved methods of waging armed conflict with all of the forces and means of the state in all theaters and space, including land, sea, air, and space.

The uplift of military theoretical work in all spheres of military

science and military economics is dictated by the situation, by our very life. With extreme sharpness, the 23rd Congress CPSU indicated that "under present conditions, the scale and tasks of theoretical work increase even more. Not one society has been so in need of scientific theory as the socialist society. Therefore, must therefore, first of all lay the path for practice, to support a strict scientific approach to the supervision of the economic and cultural life of the Soviet people."

The responsibility of the military cadres in the field of theoretical work over the problems of modern war is higher there where their responsibilities are greater to the people and the country for the readiness of the Armed Forces to carry out their duty under any conditions and to stand up for the freedom and honor of the socialist Homeland.



## ECONOMIC ACCOUNTING

A. Terekhov

Before beginning with the subject of thriftiness and economy let us say a few words about wastefulness. About four years ago the following phenomenon could be observed in a chast' of the Moscow Air Defense District. A full ration of bread for each soldier in the mess was placed on the table. Many did not eat all of the bread, and the remainder was thrown away or at best given to the nearest kolkhoz.

Can such handling of bread be defined as rational? Immediately everyone will say no. At that time this did not bother anyone. Since the established rate for bread consumption was not being exceeded it was considered that everything was in order. In fact people were wasting national property. At one of the meetings of workers of the rear service the chast' commander and his deputy for the rear called upon those present to be thrifty and to use the material goods economically. This appeal was supported by the party organization. The secretary of the party organization talked with the personnel of the rear service and suggested how to begin the movement for thrift.

It soon became apparent that reserves for economy were inexhaustible. They were everywhere. Let us again return to the bread. They began to bring it to the table cut in thin slices. There was enough to go around. There was immediately a substantial reduction in waste. A month passed. During this period approximately one ton of bread was saved. This means that the matter was to be continued in this manner. Approximately 30 tons of bread was saved last year. They think that as much will be saved this year.

Economy, however, is one side of the matter. The other consists of the fact that this measure improved the standard of service. After all it is much more pleasant to take neatly sliced pieces of bread from a plate than to break it off a loaf.

There was a time when many extensive pieces of land were at the disposal of military chastis. No one then thought of organizing kitchen gardens or keeping farm animals. At the same time conditions for this existed and still do. Now at the above mentioned chast' no one remembers who suggested the establishment of this facility.

"In essence this is really not so important," remarks an officer. "What is important is the fact that it was organized."

The chast' has an excellent pig farm, a hothouse, a garden and kitchen gardens. Cattle breeders from nearby kolkhozes and sovkhoses on visiting the army farm are surprised by the exemplary order. In 1965 the farm provided over 13,000 rubles profit. One half of this money was used to improve the food for the personnel.

The hothouse is a major source of income. During the first year it not only justified the expenditures for construction but also was profitable. Last year over ten tons of green onions were grown. The vegetables and onions grown in the hothouse bring variety to the soldiers' menu. The green onions are used with the food during both winter and summer.

The soldiers say with pleasure, in winter at home we did not have green onions but in the army we have them. Cucumbers reach the soldiers' tables early and are followed by red tomatoes. Their harvest was substantial. For example, over 18 kilograms of cucumbers were gathered from each square meter area in the hothouse. Last year during six months alone the hothouse provided a profit of 2,000 rubles.

Empty plots of soil also did not lie idle. In the spring the well prepared soil was sown with sorrel and potatoes. More than a ton of sorrel was gathered. A good potato crop was gathered from the three kitchen gardens. The entire crop was harvested and stored in the bins.

The chast' also has a young garden. It contains 400 apple trees. True, last year because of unfavorable weather conditions it did not bear fruit, but this year the farmers expect the first crop of fruit.

Such a source of income as the gathering of hay is also not passed up by the chast'. Previously the grass on the land was usually left standing. Now, however, for two years it has been cut. At present 20 tons of hay have been stored. It will be sold and the money will be placed in the army savings.

An income of over 18,000 rubles was received during last year by the food supply service.

The keeping of vegetables in the chast' has been organized with a true farmer's concern. During the winter, as is well-known, there is a substantial waste of carrots. This also occurred here. How could this be avoided? They consulted with agricultural workers and studied special literature. A solution was found: the carrots, gathered from the field, were placed in boxes, covered with sand and placed in warehouses. It is not a complicated method and is available to everyone and, what is extremely important, there is no waste.

Potatoes to be kept during winter are carefully selected in the field. Workers from the mess participate in this effort. It must be noted that the storage of food products and the storage conditions here are organized so well that for certain products there is not even natural loss.

Economic reserves were also found in the supply of clothing. It is known that the correct wearing of uniforms, correct laundering and timely repairing lengthen its useful life. This source economy is used extensively in the chast'.

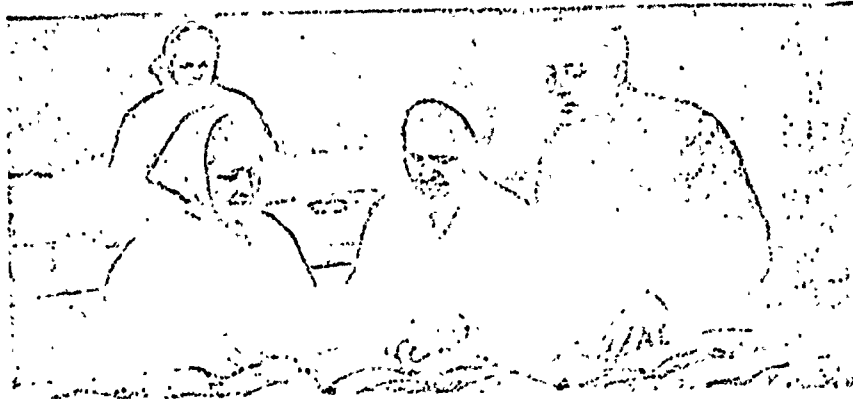
Socks, ponchos, blankets and other items that are no longer serviceable are also being used rationally here. Mittens, mattress covers, slippers and foot towels are sewn from these. A great deal of public funds were saved on this alone. And, how can one measure those daily comforts for the soldier that are created by these trifles -- small rugs, slippers and so forth.

Great savings are also realized in the billeting service. During construction and repair materials such as sand and quarystone are utilized. Electric power, lumber and coal are used in a thrifty manner, and the work of electricians and firemen is strictly controlled.

There is a large variety of furniture in the chast'. Let us say that a table is broken. Previously it was taken to a repair shop; now it is repaired without fail right here. Skilled workmen will always be found among the soldiers. As a whole 19,000 rubles were saved in the billeting service.

Other rear services also find opportunities for saving materials. For example, fuel and lubricants are housed in underground reservoirs, the tops of which are painted a light color. This reduces significantly the natural loss of fuel. Processed oil, particularly during transition from summer to winter use, is carefully collected and delivered to the dump. The state of the tanks is carefully controlled in order to forestall leakage. Knowledge and the conscientious fulfillment by the soldiers of their obligations give economic results.

More examples of the zealous management of the military economy is cited. However, what has been presented is evidence of the fact that there were many internal economic reserves in the chast'. All of them are being utilized effectively. People have begun to regard the matter with a feeling of great responsibility. It is true that this has added trouble. But the benefit received by both the state and the soldiers gives moral satisfaction to the workers of the rear service and adds energy for further search for economic reserves.



The padded uniforms that have been written off are being rationally utilized in the shops of the Ural Military District. The workers make out of these a large number of mattresses. Photograph shows (right to left): At the mattress tufting section the shop chief engineer A. Kiselev and the senior foreman L. Surkov checking quality of the product prepared by tufters A. Mitenkova and Z. Ferapontova.

Who then are these workers whose energy and creative initiative helped to find the sources of economy? There are many. They include Officer Brykin and Sr. Sgts. reenlisted service Puda and Butskikh, Cpl. Cronin and Pvts. Yeruslankhin, Savos'kin, Petrichenko, Nasonov, Gusovskiy and others. All of them cannot be listed but each of them at his post is a zealous master capable of counting the national kopek and multiplying the national wealth.

The office of the deputy chast' commander for the rear holds the challenge cup and a certificate first degree awarded to the chast' by the military council of the Moscow Air Defense District for first place in the review and competition for the best military administration. I spoke with many rear service workers and each of them asserted that the challenge cup would be retained.

I believe that they will retain it. This is because thrift has become a law here and an inherent demand of the workers of the rear services.

GRAPHIC NOT REPRODUCIBLE

## DISTANT RUNS

Col. V. Klebanov  
Lt. Col. Ye. Lokhanov

Carrying out the mission set by the Command, the motor transport battalion last winter successfully coped with the movement of military freight over a large distance in mountainous terrain. The road had many sharp and closed curves and passes. Grades accounted for more than 40% of the road's length. The difficult road conditions, decreased pressure and low air temperature had its effect on the overall work of organizing the work of movement support.

A large amount of preparatory work preceded the movement. A reconnaissance of the entire route was made by the operations group of the chief of the district military transportation together with representatives of the highway control and the local party and soviet organs was the first item. At this time they clarified the organization of dispatcher service, communications and control, technical maintenance, vehicle fueling, the messing, rest, and medical support for the personnel, and the order of transport loading and unloading, transloading during the march, and security of the freight at overnight stops.

Memorandum notes were prepared for the column chiefs and drivers which emphasized their duties when traversing passes and narrow areas along the road, the order of vehicle fueling, and the areas for messing, warming, and rest of the personnel. Instructions and discussions were held in the transport podrazdeleniya by officers of the highway and the motor transportation services, doctors, and party workers: they clarified the assigned mission, the features of the route, and the movement order and schedule. The dispatcher service personnel received necessary clarification on movement recording, organization of communications, and document handling.

Operational maintenance of the route was levied upon the highway control and was carried out by the forces of the highway maintenance sectors. A military officer was assigned to the highway control — an officer from the district's highway and motor transportation service, who was in charge of road conditions and supervised dispatcher control over the movement of the vehicle columns. During the course of the movement he maintained constant communications with the highway control and the DEU /highway maintenance sector/ and when required, took immediate steps to eliminate breakdowns in the movement. Experience proved the feasibility of such representation. The close contact of the military representative with the highway agencies provided a more realistic influence on movement support.

Twenty vehicle columns were formed for freight movement. The chief dispatcher assigned two two-digit numbers to each column: odd numbers (for the movement from the originating to the terminal loading-unloading point) and even numbers (for return movement). This made it possible to simplify orientation (the kind of column, its composition, destination) and recording of the movement. This system fully justified itself.

The motor vehicle columns consisted of 10 vehicles including a ZIL-157 tow truck to assist vehicles stuck in the deep snow or in covering steep grades. An officer was assigned to head each column. The columns were formed by vehicle numbers according to the notes in the route list. Each column included 2-3 reserve drivers. The first three vehicles were driven by the most experienced drivers, the column chief's position was in the first vehicle. One of the reserve drivers was in the second vehicle and the others in the last ones.

Direct line of sight communications in the column were lost when

moving around closed curves and along steep grades. Therefore, one of the columns was provided with two R-105 radio sets which made it possible for the column chief to exercise more effective control over the column's movement. These radio sets operated practically static-free and fully supported fulfillment of the mission.

The movement experience indicated that this type of formation of transport columns in mountainous conditions is justified. If a column is formed from a large number of vehicles, then movement speed sharply decreases, the column strings out, and vehicle fueling time increases.

It should be mentioned that each vehicle was provided with individual warning means, a warm cover, a complete set of tools, entrenching equipment, skid chains, additional fuel and oil containers, and a supply of tractor equipment.

Technical aid and rest stops were organized along the route. Included were: a repair group with a mobile repair installation and a tow truck, dispatcher post, water and oil heating facilities, cargo loading and security squads, sleeping quarters, and spare vehicles and drivers. Motor vehicle officers were designated chiefs of these posts. The posts were situated within the road DEU. Tow vehicles were stationed at difficult road sectors and passes.

Dispatcher posts along the road supervised movement and controlled fulfillment of the movement schedule. Five such posts (one of them the main one) were set up along the route. It should be mentioned that the stationing of just five posts, and their distance one from another, at times did not fully ensure the receipt of timely information on the state of the columns and the road conditions.

Dispatcher duties were performed by officers (chiefs of the technical aid and rest points). Each post had dispatcher instructions, movement record log, orders and instructions, diagrams of the road sectors with an indication of settled areas, the distance between them, road conditions, narrow areas, fueling points, telephones, eating places, medical installations, etc., the dispatcher post stamp, and armbands and flags for the controllers. A local exchange telephone was available at the dispatcher's desk. A duty telephone operator was assigned daily who, in the absence of the chief, would report data on the passage of columns and condition of the road sectors to the chief dispatcher.

In order to simplify movement recording, each column was issued a route ticket which listed all of the vehicles by their military numbers, the names of the drivers, route of movement, freight, and addressee. If a vehicle lagged, a comment was made in the route ticket as to the place where the vehicle had been left behind and the reason. The inclusion of other vehicles into the column or the carrying of servicemen as passengers was only possible with the permission of the dispatcher and a comment to that effect made in the route ticket. In passing the dispatcher post, the column chief would appropriately note with the dispatcher the arrival and departure time, the technical state of the vehicles and report on difficulties encountered.

In addition to the dispatcher posts, by agreement with the GAI (State Motor Vehicle Inspectorate) agencies, a few local motor vehicle inspectorate posts along the road were brought in for control purposes; once or twice a day they report on columns which had passed through their posts. Although they operated periodically, they nevertheless provided substantive assistance to movement control.

Information on the columns received from the senior tow truck duty personnel during their reporting was also used as a measure of control over movement. In individual cases, they were used to transmit necessary instructions to the column chiefs. This made a more realistic evaluation of the route situation possible.

A working time schedule was set up at the main dispatcher post in order to control adherence to the movement schedule. On the left side of the schedule graph they showed a straight-line sketch of the route with kilometer markings, settlements, location of the dispatcher posts, fueling stations, technical aid and rests points, eating places, medical installations, and the dispatcher communications circuit. Column movement was designated by lines with their number and the number of vehicles. Lagging vehicles were designated by squares. It was also indicated on the graph when they were included into a column. This permitted control over movement and to keep a record of all lagging vehicles and give timely assistance to the drivers.

All information received from the dispatcher posts along the route on the position of the columns and their composition was immediately reflected on the graph. At the same time, a dotted line was used to indicate the planned movement of the column and instructions were issued to the dispatcher posts concerning the contemplated time of passage by those posts, on readying the technical means for servicing the vehicles and places for the rest and messing of the personnel. All of this made it possible to provide the addressed with the approximate arrival time of the freight so they could prepare the loading-unloading area, the mechanized equipment and the work crews.

Constant telephone communication was ensured during the period of movement with all of the dispatcher posts and highway control, the DEU and the fueling points. Authorization to use the communications facilities was given to the officers of the operations group, the dispatchers, column chiefs, and senior tow truck duty personnel. The loading areas also had telephone communications with the chief dispatcher. This ensured active control over the readiness of the columns and the transmittal of necessary instructions to the loading area. The experience of using communications showed that independent intraroad telephone and radio communications are essential.

In carrying out the movement, particular attention was given to the maintenance of the roads in a passable state. Here and there, the snow storms with their snowfalls left drifts up to a meter in height. The low temperatures, down to  $-40^{\circ}$  to  $-43^{\circ}$  C, and the low air pressure in the mountain regions had a strong effect on the work of the vehicles and the personnel. Great difficulties arose in the removal of the snow drifts — the lack of a sufficient amount of snow removal equipment at the DEU was felt. Occasionally movement along individual sectors broke down for 2-3 days. The shifting of snow removal equipment from one sector to another required much time. Under these conditions, the passage of the vehicle columns was executed under the accompaniment of bulldozers or tractors. In the steppes, the main road at times was totally covered over while the adjacent areas were virtually free of snow. It was then necessary to shift movement away from the main route indicating the new direction by conventional markers from local materials (pyramids of rocks, etc.).

There were other difficulties. For instance, icing had formed along 250 kilometers of the road by the beginning of the march. This sharply decreased the movement speed of the motor vehicle columns and was a threat to safe movement. Consequently, movement along these sectors were planned primarily for the morning and evening hours and with the observance of precautionary measures when traversing narrow areas — bridges, grades, etc. Additional tow vehicles were stationed were assigned to the mountain pass areas. The increased fuel consumption under these conditions (crossing snow drifts, engine warming) and the increased number of minor breakdowns and halts along the way forced the formation of special damage control groups at the sectors difficult to cross consisting of tow vehicles, mobile repair installations, and transport



vehicles with fuel and provisions.

Despite all of these difficulties, the mission assigned to the battalion was successfully fulfilled.

PLACE MOVEMENT CONTROL SYSTEM  
ON A SCIENTIFIC BASIS

Candidate of military science  
Lt. Col. V. Korob'in

In this article we would like to examine briefly the so-called basic common models of control.

It is well known that under modern conditions, one of the basic missions of road support is that of organizing the movement flow of motor vehicle transport. Belonging to this are the planning of movement, its dispatcher control and direct control right on the roads. It is in the interests of movement organization that it is necessary to determine the nature of destructions, the survivability of the roads, and the solution of other problems.

It seems to us that the following patterns must be the models of control: distribution of the movement flow depending on the general and road condition; its operational control, that is, the selection of the optimum variant for carrying out regulating measures; rational use of the road network, the forces and means of traffic control, and their distribution by axis of direction and phase lines. The remaining patterns, for instance, determining road survivability, the volume of work for their readying, type of road surface, designing detours, will be individual ones depending upon the general ones and those emanating from them. Furthermore, they do not refer directly to the problem of movement control and, evidently, should be researched in other areas of the theory of road support. Also of importance is the question of the forming and structure of the system.

As we understand it, the tasks of further research will be the analysis of the movement control system as a whole and the development of criteria for evaluating its functioning qualities under conditions of modern military operations. It seems to us that this system will be semiautomatic where control will be headed by the dispatcher or the commander who has the right to make the final decision. The machines, however, are designated for the collection, systematization, and processing of the information. In this manner, it is necessary to research the rational combination of human and machine functions in the system.

It is perfectly clear that under the conditions of modern operations, it is feasible to use computers for the solution of varied movement control missions.

It only remains to clarify the necessary quantity, designation, composition, and outfitting of each element of the system, the required number of electronic computers and means of communication. In solving this question, it is important to set the economic effect of the equipment used, the optimum number of stages in information transmission and the stage of the centralized process of movement control.

Together with the solution of the tasks on the basic patterns of movement control, it would be desirable to automate such arduous processes as the compilation of movement schedules, their correction in connection with the execution of adjusting measures, and forecasting the movement of motor vehicle transport columns.

A scientific organization of labor is unthinkable without accurate unit time norms for the execution of control operations. Thus, also necessary for the movement control system are its own scientifically based standards. Evidently the matter should be so placed that none of the exercises of the road podrazdeleniya and chasty would be conducted movement organization without an exacting record of time spent on

informing the control posts as to the state of the roads and the movement along them, or the solution of tasks for the earlier processed algorithms, for the processing of instructions on movement control and the transmission of commands. This work in the troops can best be done with the use of documents which would permit, with a small volume of information or instructions, to transmit the maximum amount of information.

## DO NOT PERMIT FREIGHT CAR IDLE TIME

Colonel P. Yefimenko

Recently, checks were made in a number of districts and in some of the fleets, with the participation of the military community, on the employment of rolling stock, the organization of loading operations, and a steady made of all of the causes of the still existing great number of delays in freight car loading and unloading.

The work already done permits certain conclusions on the possibility of sharply decreasing idle time, labor effort, and transport costs. This is substantiated by the experiences of many chast' and podrazdeleniya. For three years now, a chast' of the Transbaykal Military District has not had a single instance of freight cars being delayed on the sidings. This is despite the heavy and frequent freight arrivals. They attentively follow the arrival of loaded cars, over the state and operation of the machinery, a podrazdeleniye is always on duty, and constant communications with the railroad stations. In the prevention of idle time, the Command feels the efficient assistance of the party and komsomol organizations and the national controls. A number of chast' and billeting organizations in this district have created special platforms for fuel unloading. This has sharply decreased labor effort, unloading costs, and a quicker freeing of the cars.

The Moscow Military District is seriously struggling against freight car idle time. Idle time has been recently decreased throughout the district. Tariffs levied by the railroad have been decreased. Through tighter cargo packing, combining deliveries by specific items and grouping guard details of following trains, two chast' alone in an 18 month period freed several tens of cars and decreased expenditures by 12,000 rubles.

Considerable work is going on among the troops for a better use of cranes and machinery, an improvement in the technology of freight operations, expanding the capacity of the raiiside depots and of the loading-unloading front, a proper maintenance and operation of sidings.

However, the task of decreasing rolling stock idle time is far from having been solved. Excess idle time, especially in cost accounting industrial and building organizations, is great and at times there is a tendency for their growth. The causes of this are primarily those of poor orderliness, carelessness, lack of action on the part of individual commanders and quartermaster personnel, a poor organization of the loading and unloading of freight cars with military cargo, the lack of a feeling of high responsibility for their obligations on the part of some officers. The needed measures for a rapid elimination of the causes and conditions which most frequently create rolling stock idle time are not always taken. We will give some examples.

The chast' in which officer V. Ryzhenko is the supply and services officer in a short period of time had to pay a tariff of nearly 5,000 rubles for freight car idle time at just one station alone. Why did this happen? Forwarding large and heavy cargo to the station, one of the district's directorates, to which the chast' is subordinated, did not concern itself with the timely preparation of the unloading front and did not concentrate any cranes there. As the cargo began to arrive it became apparent that there was nothing with which to unload it. The delivered crane was slow to be placed into operation. Had it arrived on time, there would have been no idle time.

Freight cars sometimes stand idle through the fault of the military trade personnel. At times this happens to freight cars delivering quick-spoiling goods. The matter here is not with objective causes or

with "insurmountable" obstacles. As a rule, the fault lies in the lack of proper responsibility, in carelessness and confusion instead of high operational management.

Freight car delays at the sidings and freight stations is not such a rare phenomenon with some of the trade and procurement organizations. In the past year and a half, one of the post exchanges paid the railroad nearly half of all of the tariffs levied on the garrison because the post exchange workers slowly solved the problems of receiving, unloading, and moving out the freight and delivering it to the exchanges and warehouses.

Cars frequently stand idle at the logging enterprises. Thus, in a number of instances, timely preparation of loading operations are not carried out at the timber combine (where comrade F. Shabalkin is responsible for loading and unloading activity) of the KFU /Billeting Directorate<sup>7</sup> of the Ministry of Defense. The timber lies at a distance of 25-30 meters from the loading sidings and is not sorted by diameter ahead of time. Technical rules for loading timber onto flat cars are not always observed. At times the cars are overloaded at the request of the railroad workers. There is a considerable amount of personnel turnover; occasionally the workers spend up to three hours for dinner breaks because of disorganization.

What then, from our point of view, are the ways for eliminating rolling stock idle time?

Primarily, this is the mechanization of loading-unloading operations. The availability of the necessary number of cranes and other machinery and their proper and most efficient employment is the most important condition for decreasing freight car idle time. Actually, there are chastis, enterprises, and construction sites where the timely loading and unloading operations of freight cars, especially during heavy freight traffic periods, are delayed because of the lack of a sufficient number of machines.

At times, however, cranes and other machines are not employed to full capacity in freight operations, their preventative maintenance is not done on time, and poorly trained people are permitted to operate the expensive equipment. To this we can add the cluttered state and disrepair of the sidings, their incorrect utilization, and the unadapted state of the work areas hinders the use of cranes and other machines.

For example, the unloading areas of the construction organization headed by officer S. Gruzdev, are piled with various kinds of building materials which, without speaking of loss, hinders and at times makes impossible the use of machines. Consequently, much of the freight has to be manually unloaded.

It seems to us that also a cause of idle time at the enterprises and construction sites that the organization of unloading operations and their responsibility is levied upon the material-technical supply workers while the chief engineers and mechanics are not concerned with these problems. But these are the individuals who are responsible for all of the crane equipment and other means of mechanization upon whose condition and operation depends the timely handling of freight activity.

Further. Railroad transportation works 24 hours a day. However, loading and unloading operations at depots, bases, and other facilities are conducted generally during working hours only. Consequently, a considerable part of the excess idle time falls on holidays, free days, and during non-working time. It is during these periods that deficiencies are encountered in work organization on the sidings and stations, and rapid information on freight car arrival is not set up well at the

enterprises, construction sites and even in the military chastis. In some places good lighting is lacking at the work sites which not only hinders loading and unloading and occasionally results in unfortunate incidents. Not everywhere have certain questions on wage payments to workers operating cranes and other machinery on an overtime basis been fully resolved.

Also of some importance is the fact that at time planning is done without a serious knowledge of the state of matters at the work sites and in contradiction to the economic interests of the cost accounting enterprises and has a volitional character. These shortcomings are encountered most frequently in the building organizations. Thus, the building directorate of one of the districts, prior to approval of the itemized lists and based only on the anticipated general volume of capital investment, issued schedule orders for its subordinate organizations on the delivery of cement for one quarter in an amount to 60% of the annual requirement. This was clearly excessive. In overfulfilling the plan, only a small portion of the cement received was expended. But, as it became known a little later, the cement was really needed in other areas. This is why the freight cars with the cement had to be reshipped to other points. At times they sat idle for 8-9 days awaiting a decision as to which stations to be moved. There were times when the cars with the cement had to be rerouted twice.

Frequently, lengthy idle time of rolling stock is caused by the fact that the distributors do not unload cement, sand, and gravel evenly. When a large amount of such freight arrives, the managers of the enterprises and building organizations are forced to release workers and transport machines from other jobs, including assembly-construction jobs, which naturally disorganizes the normal course of work.

Lack of planning coordination also brings about irrational shipments. One of the ZabVO /Transbaykal Military District/ building organizations had reinforced concrete structural sections delivered to it, and within a short time, these items were again loaded into the freight cars and forwarded to another place.

The examples given indicate that individual commanders and chiefs, managers of enterprises and construction organizations, and certain other officials responsible for the proper utilization of rolling stock frequently overlook the questions of loading-unloading work organization, do not analyze the causes of irresponsible freight car idle time and in connection with this cannot, with any knowledge of the matter, take any effective measures to bring about the required order.

Administrative investigation at times is delayed and conducted as a formality merely for the sake of writing off the expended sums. The true culprits and their causes remain undetected. Most frequently the sums expended are written off at the expense of the estimates of the Ministry of Defense or the productive-administrative activity of the cost accounting enterprises. In those instances when the guilt may be placed on one of the workers, insignificant sums are extracted to pay for the freight car idle time. Thus, during the first quarter of 1966, a chast' of the ZabVO had to pay nearly 8,000 rubles for freight car idle time, while those responsible for it were fined only 10 rubles and 25 kopeks even though in many instances the delay in the unloading of the rolling stock was caused by the lack of administrative ability on the part of officials of this chast'.

Consequently, instances of bringing individuals to material responsibility have purely a symbolic character. Therefore, they do not have any real significance for raising the responsibility of officials for an accurate organization of loading-unloading activities and the elimination of rolling stock idle time. Apparently the financial agencies also should strengthen control over the correct expenditure of



means for shipments and to avoid unfounded surveying of tariff payments for freight car idle time without conducting an inquiry. As an example, such measures are already in effect in the Kiev Military District.

The military transportation agencies are conducting thorough work important for the troops. However, many of them still do not have any noticeable effect on a rapid solution of questions concerned with the elimination of excess idle time, and the causes of this are poorly studied and weakly effective. Information forwarded by them to the Command on the employment of rolling stock frequently has a periodic and general character which hinders the making of concrete decisions.

A certain part of the workers, including some military logisticians, have just a surface knowledge of the rules of shipments, the order of receiving and shipping freight. Evidently, it is necessary to provide clarification among the troops the basic elements of railroad transportation operations. Much also remains to be done in this field by the military transportation officers.

Good initiative was demonstrated by the party organization of one of the military komendaturas. At its meeting, when the work of the communists in preventing idle time was discussed, they invite the secretaries of the party organizations of those chasti and enterprises where these negative phenomena occur most frequently.

There are many good examples in nearly all of the districts and fleets where the state controllers persistently and energetically expose deficiencies in loading-unloading operations, the maintenance and operation of machines and sidings, attain the increased responsibility on the part of the workers, and the elimination of complacency, indifference to deficiencies and various delays.

In the Moscow and Transbaykal military districts, committees and groups of national control, with the participation of transportation officers, finance personnel, engineers and technicians, logistics personnel, activists of the Komsomol'skiy Prozhektor, workers, and employees hold inspections in the majority of chasti, enterprises, and organizations. This work was preceded by the implementation of well conceived preparatory measures. One of the political sections of the Moscow Military District called a methods-instructional assembly of the participants of the forthcoming inspection. Useful reports were given by officers of the military railroad komendaturas, comrades Voropayev and Burmistrov. They discussed the state of affairs in the chasti and the enterprises of the garrison, and gave advice on how best to fulfill the mission levied upon the state controllers.

Nearly everywhere the state controllers, in holding discussions, study of materials, and clarification of the causes of excess idle time, work breakdowns and disruptions, demonstrated interest in the practical suggestions which could help improve matters. Mass control has been well established — this is a powerful means for strengthening law, order, and discipline among the troops, the proper maintenance of armament and equipment, and ensuring thriftiness and preservation of material and monetary means.

# LOADING ECHELONS WITH HEAVY EQUIPMENT AT SMALL STATIONS

Lt. Col. K. Davydov

During one of the exercises, it became necessary to shift a tank echelon to another direction. The podrazdeleniya with wheeled equipment executed a march to the assembly area, while those with tracked equipment were transported by railroad.

Troop loading is a complex and responsible element of movement. To this end, it was necessary at this exercise to organize it within the shortest time frame at small intermediate stations situated on lines with heavy train traffic. The track development of the stations was not great, there were no loading or unloading facilities, and one of the outside tracks of the stations had to be used for loading operations. End loading platforms (loading ramp) were constructed here (Fig. 1).



Fig. 1: Loading station diagram.

a - Platform (loading ramp)

b - Siding (switchback)

Echelon loading experience shows the undeniable advantage of the end loading platforms over the side loading. End loading is more economical in time and there is less damage to the rolling stock and to the unloading equipment. These advantages are more visible when loading is carried out at night and with no electrical lighting.

There were very few empty flatcars for transporting activity and the majority of them had hand brakes. It was therefore necessary to search for those measures which would permit a minimum expenditure of time for loading and shifting of cars, as well as using four-axle flatcars with the braking platform facing the loading dock (so-called flatcars with "facing brakes"). The empty cars were formed ahead of time with consideration given to the equipment to be moved with the troops and the working conditions of the station.

Let us examine the basic conditions of the operating principles we used in organizing the loading of troop echelons with heavy equipment.

We situated the end loading platform on track No 5 in such a way that it would be possible to use the quarry siding as a switchback and which, if necessary, could handle the entire make up of the echelon. The consecutive delivery system was used for loading. For the troop train which was to carry 22 medium tanks and 6 special wheeled vehicles, the make up was as follows: flatcars 1, 8, and 14 with "facing" brake platforms; 7 and 22 with "leading" brake platforms (the platforms headed away from the loading platform); cars 2, 9, and 15 with metal sides (62-ton capacity, 13.3 meters inside length); box cars (passenger and kitchen) in one group between flatcars 13 and 14. In all, there were five flat cars in the troop train with brake platforms.

The following operating procedure was employed. The empty cars were brought up on track No 3. Flatcar 1 was uncoupled and the make up was brought up to the loading platform and flatcars 2 through 7 were loaded (Fig. 2). Two tanks, with a combined weight of 72 tons were loaded on flatcar 2.

After this group of cars was loaded, the make up was transferred through the switchback to track No 3; the loaded flatcars were coupled to flatcar 1, while the empties were again brought over to track No 5.

At this time, flatcars 9 through 13 were loaded, with two tanks placed on flatcar 9 (Fig. 3).

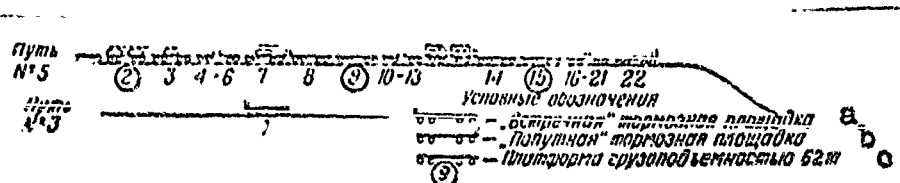


Fig. 2: Flatcar loading diagram, first.

- a - "facing" brake platforms
- b - "loading" brake platforms
- c - 62-ton flatcars

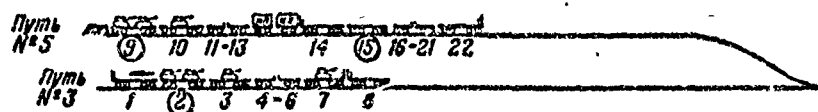


Fig. 3: Make up diagram, second group.

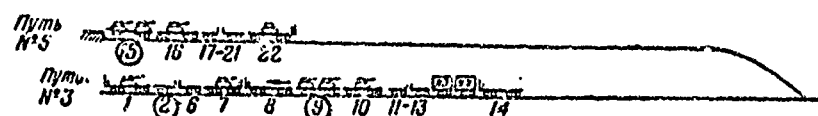


Fig. 4: Flatcar loading diagram, third.

Upon completing the loading of the second group of cars, the make up was again transferred to track No 3 and flatcars 9 through 14 and all of the box cars were uncoupled, while empty flatcars 15 through 22 of the third group were brought up to the end loading ramp. In loading this group, two tanks were loaded on flatcar 15 (Fig. 4). On track No 3, one tank each were driven off of flatcars 2, 9, and 15 to flatcars 1, 8, and 14 respectively, while the vehicles were placed over the coupled flatcars. The make up of the train came to an end at the same time as the loading.

A few words about the loading of the two medium tanks onto the 62-ton four-axle flatcar.

Not more than 1 ton per axle is permitted by the technical conditions of overload on such flatcars. Under our loading method it came to approximately 2.25 tons. As experience has shown, in the switching of such flatcars at a speed of 5 km/hr, no damage was incurred by the under carriage of the rolling stock or the upper portion of the track type II a rails).

This method of loading echelons with heavy equipment is also suitable in using limited length side loading platforms. From our point of view it can be recommended for operation under complex conditions.

cooling system is blown out with compressed air, the liquid preservative grease is then pumped through the system and drained off. Outside surfaces are greased with a brush or a sprayer. In this manner, when using ZhKS the preservation of mechanisms is practically identical to their preparation for operation with a pumping through the oil system as required by maintenance instructions. In preserving mechanisms during their operation, the oil system is placed into a state of preservation without any additional operations.

All shipboard technical equipment preserved with greases K-17, K-17n, and NG-203B were preserved under normal conditions in accordance with their storage rules aboard ships and in Navy depots. However, ZD6 and K-150 internal combustion engines were preserved by the "working" method with ZhKS. They were stored in boxes under an overhang on open areas, while the air temperature varied from  $+31.2^{\circ}\text{C}$  to  $-27.8^{\circ}\text{C}$ , while the average relative humidity exceeded 80%.

Under these conditions, the NG-203B grease lost its initial consistency after 18-20 months. It accumulated in the crank cases, in the pockets of the internal combustion engine heads, in the oil drain lines and other places. A solid deposit, at times adhering to the metal, formed on the surface. After the removal of the grease, dark spots were observed to have formed in a number of places. Thickened clumps clogged the oil lines consequently in de preservation it was necessary to completely disassemble the engine.

This is the way matters stood with the ZD6 internal combustion engines.

The internal combustion engines had to be completely disassembled in order to determine the state of the inner surfaces. Inspection showed that all cavities and separators of the crank shafts were clogged with a resin formation thickened grease. The inner surfaces of the crank cases were covered with a thickened grease, the openings of the receiving screens of the oil drain pumps were clogged. In the preservation of cylinders, the NG-203B grease separated into flakes and thickened on the bottoms of the pistons. It was removed by hot oil washing, steam, and diesel fuel. After the washing, the engines were assembled checked in operation for an hour. After inspecting the filters after operation, it was found that the screens of the crude cleaning elements were clogged with solid clumps of NG-203B grease which would not dissolve in diesel fuel.

In this way, experience showed that the use of NG-203B grease is not feasible for the preservation of internal combustion engines.

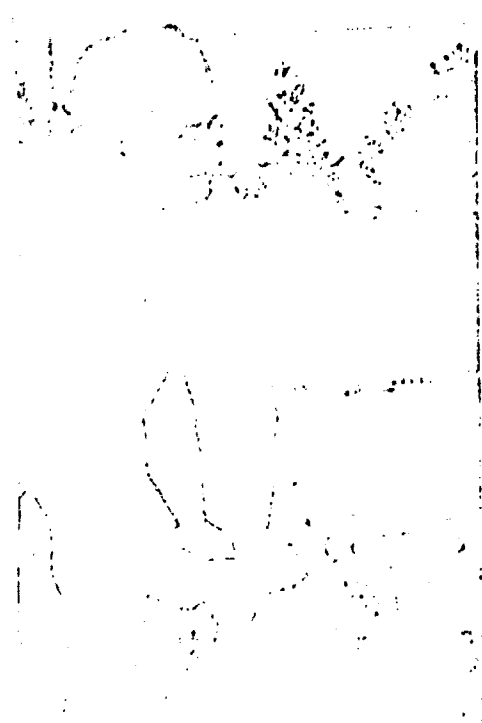
The operating tests of this grease were then continued only for parts of the main geared turbine units. An inspection and review of the mechanisms showed that clumps formed in the areas of grease accumulation. Clumps of a black color, which dissolve in heated turbine lubricant, were discovered in the lower part of the pressure cavity of the GTZA bearings (turbine and reducer) especially in the bearings of the second stage wheels. In turning the GTZA  $180^{\circ}$ , a solid band of thickened grease, 30-40 mm in width, was found to have formed along the entire length of the stern journal of the shaft of the second stage.

But when the K-17 and K-17n greases were used, no formations were found during the entire testing period and their use was permitted in the preservation of electromechanical equipment for all types of ships and auxiliary vessels of the Navy. The question arose on determining the periods of their preservative action, and, finally, it was necessary to select the best for the preservation of shipboard gear.

It should be mentioned that by their protective properties, the

K-17 and K-17n greases gave identical results. They ensured a dependable protection of the preserved surfaces for a four-year period in the storage of technical equipment aboard ships or in depots.

There was no corrosive damage noticed on any of the preserved surfaces. The grease retained its initial consistence on the inner surfaces (shaft necks of the turbine mechanisms, crank shafts of internal combustion engines, elements of the fuel apparatus, jets, etc.). A thin and solid transparent layer was observed. The K-17n grease acquired a lusterless hue on the outside surfaces and a dark brown color in areas of accumulation; a deposit of sodium nitrate was observed on the preserved surfaces.



There is much equipment under the head of the POL depot, Master Sergeant reenlisted service D. Gladikh. But the able specialist successful carries out his tasks. He is aided in this by his outstanding knowledge of his work, his industriousness, and his great work know-how. Behind comrade Gladikh lie 25 years of service in the Armed Forces. No wonder he is honored as one of the best specialists in the fuel supply service.

**GRAPHIC NOT REPRODUCIBLE**

In order to determine the state of preservation of the inner surfaces of an engine and their state of lubrication, a complete disassembly had to be made of the ZD6 engine preserved by the "work through" method with K-17 grease and the K-150 engine preserved with K-17n grease. The surface of the metal could be seen everywhere through the layer of grease. No flaking or scaling of grease from the preserved surfaces was noticed and the grease retained its initial consistency in small gaps. In areas of K-17n grease accumulation (engine crank case, bearings, oil cavities, etc.) on the preserved surfaces, there was a layer of sodium nitrate in the form of an oily suspension.

Two other ZD6 and K-150 engines preserved with K-17 and K-17n greases respectively and stored for a period of 4 years were checked under operation without preliminary disassembly. The tests were conducted in all operating modes for the following periods: the ZD6 engine for 50 hours and the K-150 engine for 10 hours. They were disassembled after this. Nothing was noticed worth commenting on on the state of the surfaces. The piston and oil remover rings were movable and the pistons were clean. The K-17 and K-17n greases were completely removed from all of the surfaces (washed off by the circulating oil).

Experience has shown that internal combustion engines preserved with K-17 and K-17n greases can be put into operation after a 4-year

cooling system is blown out with compressed air, the liquid preservative grease is then pumped through the system and drained off. Outside surfaces are greased with a brush or a sprayer. In this manner, when using ZhKS the preservation of mechanisms is practically identical to their preparation for operation with a pumping through the oil system as required by maintenance instructions. In preserving mechanisms during their operation, the oil system is placed into a state of preservation without any additional operations.

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Under these conditions, the NG-203B grease lost its initial consistency after 18-20 months. It accumulated in the crank cases, in the pockets of the internal combustion engine heads, in the oil drain lines and other places. A solid deposit, at times adhering to the metal, formed on the surface. After the removal of the grease, dark spots were observed to have formed in a number of places. Thickened clumps clogged the oil lines consequently in depreservation it was necessary to completely disassemble the engine.

This is the way matters stood with the ZD6 internal combustion engines.

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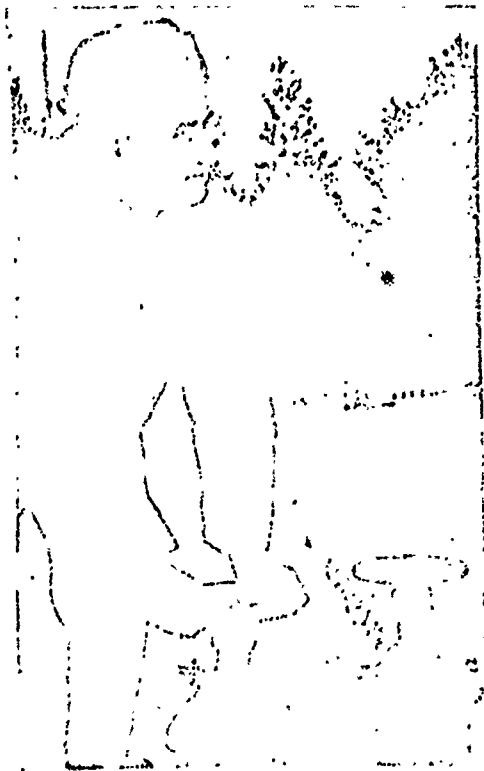
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There is much equipment under the head of the POL depot, Master Sergeant reenlisted service D. Gladikh. But the able specialist successful carries out his tasks. He is aided in this by his outstanding knowledge of his work, his industriousness, and his great work know-how. Behind comrade Gladikh lie 25 years of service in the Armed Forces. No wonder he is honored as one of the best specialists in the fuel supply service.

**GRAPHIC NOT REPRODUCIBLE**

In order to determine the state of preservation of the inner surfaces of an engine and their state of lubrication, a complete disassembly had to be made of the ZD6 engine preserved by the "work through" method with K-17 grease and the K-150 engine preserved with K-17n grease. The surface of the metal could be seen everywhere through the layer of grease. No flaking or scaling of grease from the preserved surfaces was noticed and the grease retained its initial consistency in small gaps. In areas of K-17n grease accumulation (engine crank case, bearings, oil cavities, etc.) on the preserved surfaces, there was a layer of sodium nitrate in the form of an oily suspension.

Two other ZD6 and K-150 engines preserved with K-17 and K-17n greases respectively and stored for a period of 4 years were checked under operation without preliminary disassembly. The tests were conducted in all operating modes for the following periods: the ZD6 engine for 50 hours and the K-150 engine for 10 hours. They were disassembled after this. Nothing was noticed worth commenting on on the state of the surfaces. The piston and oil remover rings were movable and the pistons were clean. The K-17 and K-17n greases were completely removed from all of the surfaces (washed off by the circulating oil).

Experience has shown that internal combustion engines preserved with K-17 and K-17n greases can be put into operation after a 4-year

period of storage through their normal readying for operation without carrying out any depreservation activities.

In the preservation of electromechanical equipment, the possibility was checked for short-term operation of internal combustion engines on liquid preservative greases. They were run-tested with this in mind in all operating modes. In particular, the K-17n grease was used for chocking engine K-150, diesel-compressor DK-2; electric compressor EK 7.5-1, and K-17 grease for engines ZD6, K-150, DK-2 and others.

Experience has shown that K-17 and K-17n can be used for preservation of internal combustion engines by the "working" method, and if required in the short-term working process. An even lengthier storage period has been found for the greases. Thus, if GOST 10877-64 establishes the storage life of K-17 grease as two years when kept in supplier built containers, in actual practice it was found that neither grease had any of its physico-chemical indices even after a three-year storage period. They corresponded to the technical requirements for their delivery. Their protective properties were also retained.

However, further checking showed that K-17 grease had higher operating qualities. Its stability was retained during a period which fully responds to modern requirement in arranging the storage of equipment aboard ships and in depots.

СЕРВИСНОЕ МОД. ВЕРВОДПАСИТЕ

## REPAIRING FOOD SUPPLY SERVICE EQUIPMENT

Eng. Lt. Col. N. Kalyuzhnov

It is not a simple matter to ably organize the repair of food supply service equipment and constantly maintain it in a model condition, it requires much effort and many worries. A certain know-how in the solution of this problem has been accumulated in our district. We would like to tell you about it.

Usually, major and intermediate repair of kitchen technological, thermal, and refrigerating equipment has been handled in the mechanical unit repair shop of the food supply service. Our shop is a small enterprise with a differentiated division of labor based on the unit-flow method of repair work organization.

What is the essence of this method? It is that the repair of mechanisms and units is broken down into assemblies. The work on each assembly is done by a production brigade or team, and each worker in it is assigned to a specific operation. The assemblies move from the brigade (team) to the assembly line.

The assemblies are manufactured and assembled in the shop according to the technology of assembling the item. For instance, teams are placed in sequence along the field kitchen repair flow: assembly-disassembly of motorized field kitchen hitches, removal of sheet metal, pressing and bending, electric welding, furnace removal, processing and readying the food cooking kettles, assembly and painting. In addition, the flow line also has specialized brigades of lathe operators, iron workers, and carpenters which provide the teams with items for the appropriate assemblies.

Going over to this method of repair has permitted us to make a more rational placement of the workers with a consideration of their specialties and qualifications, a better use of lathes and equipment, and raise the level of production. In the final result, all of this has significantly raised labor productivity and decreased work costs. There has been a sharp cessation of non-productive expenditure of time, the shops have begun to work rhythmically, and production areas have been freed which has made it possible to install new machinery and, finally, rejects have decreased considerably.

This method is also used by us in the manufacture of new products.

But it is not always economically feasible to send the items over to the district's shop. For example, it seems to us that it makes more sense to repair scales, small kitchen technological equipment, the maintenance of refrigeration equipment, motorized kitchens and other equipment. Not only is a savings effect realized but it ensures continuous operation of the equipment which is very important when there are no replacement parts.

Routine maintenance and partial third echelon maintenance is organized along two lines: by the forces and means of the military chast themselves and by specialized mobile brigades of the repair shop.

Our district's repair shop has a mobile repair brigade consisting of 4-5 specialists. It includes: a scales master craftsman, refrigeration equipment mechanic, an electric welder, two metal workers. Each of the workers has 2-3 related specialties. Thus, one of the metal workers usually has a painter's specialty while the other has that of a tinsmith. The brigade is assigned a vehicle and equipped with tools, necessary materials, and spare parts.

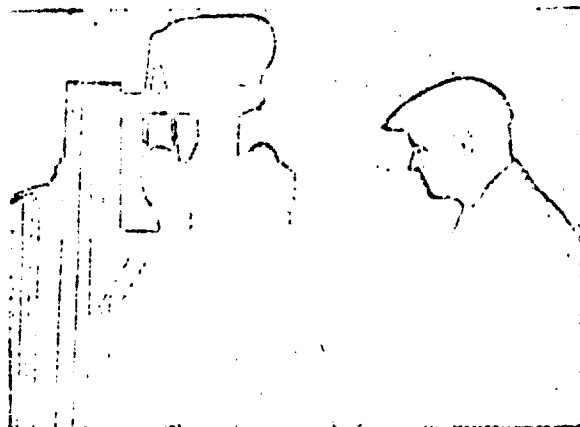
In the garrison, the brigade is usually located with the repair podrazdeleniye of one of the chasti or at some site of the food supply service (warehouse, mechanized field bakery, kitchen and mess hall, or other. Here they conduct third echelon maintenance and the technical maintenance of field kitchens, technological and refrigeration equipment of the kitchens and mess halls with their subsequent installation and testing. Technical equipment requiring major overhaul is taken down by the brigade and sent by the supply and service personnel to the repair shop for repair under fixed conditions.

The repair shop usually does not avoid the military chasti located close to the garrison where it operates.

Periodically, the mobile brigade repairs, services, and rebuilds the technical means being used and stored at the district food warehouses.

The mobile brigades are popular among the troops and now there is reason to fix them organizationally and assigning them repair trucks outfitted with equipment and tools. It would also be feasible to re-examine the authority of the shops for the purpose of their expansion. In particular, they should be given the authority to accept orders from the military chasti for the manufacture of individual items of equipment required for the needs of the food supply service.

Military logistics personnel are well aware how difficult it is at times to place orders for the manufacture of non-standard items or devices for the kitchens and mess halls, the warehouses, and the food and clothing supply points with the civilian repair shops and plants. But the repair shops, as a rule, cannot carry out such work since they are non-planned and, consequently, are not provided with products and materials. By presenting the shops with even broader productive independence in planning repair volume and, if even partially, in the manufacture of food supply service equipment on the basis of direct orders from the chasti will strengthen their contact with the troops, will improve the state of repair work and this will facilitate an extension of the service life of this equipment and save money and materials. No doubt



Repair shop metal worker O. Chaban aligns a thermos on the lathe built by the rationalizers.

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all of this taken together will have a positive effect on the condition of the service. The central supplying agencies, however, will have to support the repair shops in their plan-orders with necessary materials and spare parts for fulfilling troop requests.

A few words on the organization of repair and the operation of the equipment of the food supply service in the military chasti.

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Routine maintenance and the technical maintenance of the service's equipment in a number of military chasti in our district is organized by the chief of the food supply. They are partially fulfilled by the motor vehicle repair shops and the armament repair shops, while light maintenance is frequently done by the cooks themselves. In particular, this is the way matters stand there where officer Kashin is in charge of food supply. As a rule, however, the quality of such service and repair does not meet the required standards as it is limited to greasing and painting of equipment. The servicing of equipment by non-T/O metal worker electricians also did not justify itself. The fact is that these people usually carry out many other duties connected with the servicing of several models of equipment and armament therefore they have little time left for the servicing of the food supply service equipment. Yes, and even the podrazdeleniya commanders look upon it as secondary.

At the same time, the technical outfitting of the food supply service is constantly growing. Now, nearly every chast' operates and stores hundreds of items of various equipment. These are field kitchens, boilers, electro-thermal, technological, and refrigeration equipment, special vehicle bodies for food delivery, water tankers, demountable containers, tents, and, in some chasti, the means of field baking, electric power plants, and many, many others. All of this equipment requires constant maintenance and timely repair. This is why life demands that each military chast' would have metal worker-electricians for the operation and maintenance of the technical means under the jurisdiction of the food supply chief. Their training can be organized, for example, at the district cooks schools using soldiers of the first year of service.

As experience teaches, it is difficult to carry out repair work unless well supported with materials, especially spare parts. For several years now we have centrally manufactured in the district's repair shop those items which wear out the quickest, primarily those from the field kitchens and thermoses. Then, these items are provided to the military chasti and subsequently, the repairs are hardly more than a replacement of the unusable and worn out parts.

In the repair shops, however, it is only possible to manufacture just a limited listing of spare parts, consequently the time has come to organize a planned and centralized delivery of assemblies and spare parts from among those supporting the requirements of the troops and the repair shops.

Such are our views on organizing the repair of equipment and accessories of the food supply service based on the work experience of our district's repair personnel.

## FIELD MAINTENANCE OF MOTOR VEHICLES

Lt. Col. (Reserve) L. Shakhnovich

The mobile servicing ramp (Model PE-5), developed by the technological design bureau of the Khar'kov Motor Transport Directorate, is designed for the technical inspection and maintenance under field conditions of the GAZ and ZIL type motor vehicles. It is transported on a single-axle trailer, by a ZIL-150 vehicle using a special hitching device.

The load capacity of the service ramp is 5 tons when set on supports. Its overall length in the travelling position without drive-on ramps, is 5920mm, 10,420mm in the working position, and its width is 2400mm. Its height is 1050mm across the rear wheel working area. The track width of the wheel-guard rails is 1000mm and the width of the cart track is 860mm. The service ramp weighs 2500kg in a travelling position.

Changing the service ramp from a travelling position to an operating requires 15 minutes and 15-20 minutes for the reverse. This is done by 4-5 men. The vehicle's front axle is suspended on a sliding bar or a cart.

The chassis of the mobile service ramp is made from the frame of a surveyed ZIL-5 or ZIL-150 vehicle, with the rear axle housing with hubs and wheels, (last reducing gear), springs, and suspensions. A hitching device, of a single-axle type with front support, is welded on to the front part of the frame. The reducing gear and differential axle are removed from the rear axle housing; the hubs are covered with flanges attached to them by three bolts; and the rear springs and the spring loads are greased and tightened by the clip nuts.

Four sets of motor vehicle wheels -- 7.5-20, 34x7, or 210-20 -- are used for the service ramp. Stability during work is obtained by one front and two rear supports. The front support is hinge-attached to the chassis frame. It is secured in the working position by locking pins inserted into the upper opening of the arm and bracket. The supports are additionally secured by cross braces.

The service ramp may be moved manually. For this purpose the forward support has a wheel which can be moved up or down by a vertical screw and can be turned 360 degrees around the vertical axis. In the travelling position, the front support is placed under the chassis frame and secured by a locking device. The welded service ramp frame is constructed from No. 16 channel iron and No. 5 and 6 angle iron.

A movable cart is placed on the directing longitudinal frame members and used to overhang the front axle. Its load capacity is 4 tons. A sliding bar type arrangement may also be used for this.

The rear frame supports are raised along the directional frame members and secured by pins. The supports have screws to adjust the height of the service ramp sections. Vehicles are driven up onto the service ramp along inclined drive-on ramps. These are constructed from No. 10 channel iron and No. 6 angle iron or from No. 18 channel iron with one side cut off. The drive-on ramps are interconnected by cross pieces to provide rigidity. The stability of the drive-on ramps is ensured by four hinged supports. The service ramp accessories includes a lean-to ladder and a sliding bar return mechanism. The driver leaves the cab by means of the ladder and can independently perform required engine adjustments. Rollers, 25mm in diameter are used for the movement of the sliding bar. Any welding operations to be performed in the assembly of the service ramp are done electrically (D-42A electrode).





driving onto the service ramp, the front axle suspension cart must be in its initial rear position. It is absolutely forbidden to drive a loaded vehicle onto the service ramp.

Observing all of these conditions guarantees the rapid readying of the service ramp for work and for work convenience and safety.

RECEIVED NOV 1 1955

Lt. Col. B. Golubkov

Two candidate's theses were recently defended at the Military Academy of Rear and Transportation. One of these was devoted to the study of the possible application of anode-streaming chrome plating for the restoration of motor tractor parts and raising their wear resistance. Using theoretical research and laboratory-production experiments, its author, F. Efendiyev, proved the feasibility of using anode-streaming chrome plating in motor vehicle repair work. The thesis develops the optimum parameters and conditions of anode-streaming chrome plating, a nomenclature of motor tractor parts to be chrome plated, and a description of the production facilities to be employed in this work. Convincing examples are given to support the feasibility of using this method in industry and in repair work. It was shown, in particular, that the employment of anode-streaming chrome plating at the Leningrad Motor Vehicle Repair Plant in 1966 provided a great savings in the major overhauling of 600 engines.

In his thesis, comrade P. Eyzler studied some methods of an accelerated determination of the basic properties of cohesive soils which is an important task in studying, designing, and building roads, airfields, and various engineering works. The author developed several methods for determining the strength and deformation properties of cohesive soils, the characteristics of their friction and cohesion, and for testing of cohesive soil for compactibility. Unique devices and adaptations were built through which one can practically and with sufficient accuracy provide the builders with the characteristics of cohesive soils, in which they are interested under either laboratory or field conditions.

# HOW TO ELIMINATE BREAKS IN THE WINDINGS OF THE MPV-11.7/6A OSCILLATOR-ARMATURE

Capt. V. Bondarev

The synchronous generator has lost its excitation. The cause? One of two: either a break in the windings of the exciter-armature or the winding has become disconnected from the "rooster" of the collector plates. What's to be done? How can the defect be eliminated? In the not too distant past the generator would have been removed from the crane and sent to a special shop. If there was no replacement generator the crane stood idle.

This is the way it was. Now we do not remove the generator from the crane. We eliminate the defect by removing the broken sections from operation.

As we know, the winding of an exciter-armature is a wave and closed type. In the event of a wire breakage or disconnection from the collector plate "rooster", it is essential to locate those plates between which the circuit was broken. This is done with a megohmmeter or M-57 pocket ohmmeter by checking in sequence the proper circuit operation of the winding circuit of each collector plate. If the exciter-armature winding section is in good working order, there will be very little resistance when the collector plates are shorted by the megohmmeter or ohmmeter. If there is a break in the section, the megohmmeter or ohmmeter will show a high reading.

Further, a colored pencil or paint is used to indicate those collector plates between which a high resistance has been found, then by soldering or riveting lead or aluminum wires, to the face sides, we short the two plates. Now, having removed the broken section from operation, we again have a closed circuit of the armature winding. The generator then renews its excitation.

When this is done, the exciter's voltage drop is very small and has practically no noticeable effect on the generator's operation. In view of the asymmetry of the winding's branches, only a slight sparking of the exciter brushes is noticed, but this lies within the permissible limits.

In the event generators of truck cranes K-104 and K-52 become inoperative, only 2-2.5 hours of time were required to locate and repair the defects. After this, the crane's generator was in operation several hundreds of hours.

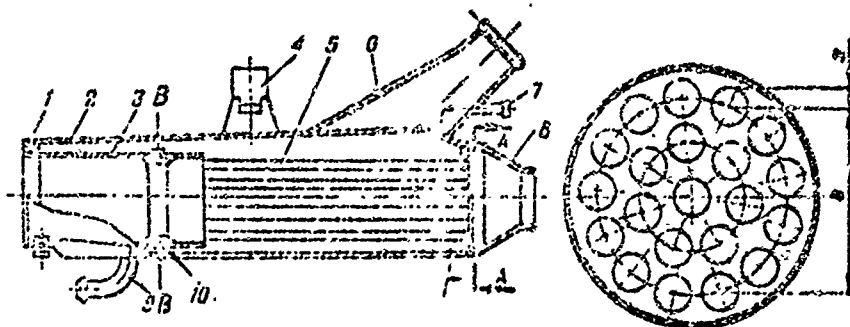
This method may be recommended for the rapid and temporary operation of the MSA 73/4A synchronous generators under field conditions. Up to five sections -- some 7% of the total number -- may be excluded from operation.

## REPAIR OF HEATER-BOILERS

Eng. Capt. V. Yermakov

The heater-boilers of the At-T tracked artillery prime movers and BAT engineer vehicles which became imoperative because of a leak in the front or rear walls of the core, or in the pipes and cylinder are not usually replaced. This, of course, is uneconomical and, in addition new boilers are not always on hand particularly if the vehicle heater is of an early type.

We repair these units in our own shops. This is how we do it. If there is a leak in the rear wall of the core (by the smoke accumulator), the smoke accumulator is cut away by means of a hacksaw or gas cutting torch along cross-section AA and the wall is sealed.



Heater-boiler:

1-flange, 2-housing, 3-cylinder,  
4-bracket, 5-core, 6-bell  
7,9-connecting pipes, 8-smoke  
accumulator, 10-accessory collar

Cross Section AA

If the leak is detected in the front wall of the core in the area of collar "a" then it suffices to cut the housing along cross section BB and CC (along the rear wall of the core), remove part of it and seal. Elimination of a leak in the area of collar "b" requires an additional cutting of the cylinder along cross section BB. True, this cutting is somewhat more complicated because the cylinder is made from heat-resistant rust-proof steel.

After a welded bead has been placed on the front wall of the core, the cylinder is sealed around the perimeter and an accessory collar is put in place. The core is repaired by the insertion of inserts (pipes) with subsequent welding around the face. If this cannot be done, the core is replaced.

Heater-boiler hermetic sealing is checked after repairs. The connecting pipes are closed with plugs, the system is filled with cooled water and a pressure of 0.5-0.7 kg/sq. cm. is applied through the bell.

Hermetic sealing of the core is checked separately from the assembly operation. Repairing a heater-boiler is quite complicated and it is preferable that the work be done by the motor vehicle repair shop specialists.

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## SINKING METAL PILES WITH A LIGHT DIESEL-HAMMER

Eng. Lt. Col. I. Nesgovorov

Locally available materials are frequently used to expedite restoration of highway bridges: timber and metal (metal constructions, rails, pipes). Moreover in constructing low water clearance bridges, various rolled steel items may be used not only for the span structures but also for the bridge pilings (in non-forested areas). However, can such piles be sunk by the DB-45 and DM-150 diesel-hammers which are organic to the bridge podrazdeleniya?

We conducted tests sinking of rolled steel piles with these hammers. We sank III-a rails, No. 18-I-beams and U-beams, and 22-cm diameter wooden piles to the same "limit" into a heavy dry loam. The piles were 5 meters long and weighed 110-170 kg. The time requirement for sinking the metal piles was approximately one-half that required for sinking wooden piles and the depth of their sinking was only 10-15% greater.

As experience showed, the DB-45 and DM-150 diesel-hammers may be fastened to the rolled metal piles by standard chucks which come with the hammers. To attach the DB-45, an opening has to be burned out (or punched through with a rail hole-punch) under the king bolt. A groove must be made for the arresting device when attaching the DM-150.

The locking of the metal pile face with that of the chuck (to safeguard the chuck pillow against damage) must satisfy requirements of an even distribution of the shock force against the pillow. Consequently, a special insert --"cap"-- must be used. It is most convenient to use wooden holders to center the rolled metal pile in the chuck.

The pile head, rolled metal piles whose cross-section is greater than the chuck, should be made symmetrical or asymmetrical.

Thus, when necessary, the DB-45 and DM-150 diesel-hammers may be used for the sinking of rolled metal piles.

RECEIVED 20001114

## SHIPS OF THE US NAVY AUXILIARY FLEET

Capt. 3rd Rank F. Bekker

The US Naval Forces hold first place in the composition of the navies of the aggressive military blocs. The US imperialists make very frequent use of their fleet and marines for armed intervention into the internal affairs of other governments. US Naval forces are constantly in the Mediterranean and the Far East, that is, in those areas which are situated close to the borders of the Soviet Union and other socialist countries.

The Navy's role in carrying out the aggressive plans of the American imperialists in the post-war years has grown considerably. This is explained by the fact that the navy has become armed with nuclear and missile weaponry and many combatant vessels are being modernized. New ships are being built including those with atomic power and naval aviation is receiving new models of aircraft and helicopters. The participation of the US Navy and Marines in the intervention in Vietnam once again confirms the aggressive missions standing before the US Armed Forces.

Along with the increasing role of the Navy among the other branches of the US Armed Forces, the significance of the auxiliary fleet is also growing. This is understandable since the effectiveness of naval strike forces depends upon it to a considerable degree. The structure of the auxiliary fleet is also changing. Earlier the auxiliary vessels were grouped into special soynedineniya of the mobile rear, now they are part of the strike group compositions. They are being reequipped for the purpose of a complex support of the combatant vessels with all forms of material supplies.

The broad circle of missions assigned to the auxiliary fleet sets the great variety of vessels. The composition of the US Naval auxiliary fleet includes destroyer and submarine tenders, ships for carrying ammunition ammunition and other cargoes, refrigerator ships, repair ships, ice breakers, radar picket ships for tracing missiles and artificial satellites for research in the field of long range radio communications and ensuring the long range radio communications of the strike forces, and for the surveying and hydrographic and other ships.

As reported in the magazines Bureau of Ships Journal and Naval Engineers Journal, the main line taken in the building of the auxiliary is that of developing ships which, being part of the strike groups, would sharply increase its operational range and combat capabilities. According to these magazines, many auxiliary ships are being created by reequipping the "Victory" and "Liberty" ships, escort carriers, and others. The number of special design vessels is also increasing. We will provide the characteristics of some of the vessels of the US Navy auxiliary fleet.

One of those are the AOE-1 ships which can simultaneously carry a supply of fuel for the combatant vessels, nuclear missile and conventional ammunition, food supplies including frozen items, and other cargoes. The capacity of the cargo fuel tanks is approximately equal to that of the large naval tankers, while the capacity of the holds for ammunition, food, and other cargoes is equal to that of the largest military transports. The full displacement of these ships is more than 50,000 tons, length 244 meters, and their draft under full load is 11.59 meters. The cruising speed is 26 knots. The power of the main engines is 60,000 hp.

The AOE-1 has three decks and several platforms. There is a covered enclosure between the forward and after deck houses in which



the cargo receives final processing before being transferred to other ships. Platforms are also located here on which cargo ready for transfer is placed. Each such platform is equipped for fuel transfer. Nine fueling areas are situated along the portside for the fueling of aircraft carriers and six areas along the starboard side for the fueling of any ship. Cargo is moved vertically by elevators or conveyers, and by automatic loaders and conveyers. The ship carries two helicopters for supplying vessels operating away from the strike group. Missile loading and unloading is conducted independently of cargo handling. Missiles are moved along suspended rail lines and suspension cranes situated under the upper deck beams.

One of the characteristic features of the AOE-1 is its capability to transfer any cargo including missiles and fuel while underway. For this purpose the ship is equipped with high speed automatic system of the shuttle type and a system for refueling ships while underway. This equipment is designed for the transfer of cargo between ships over a span of 61 meters. This decreases collision danger and does not require any reduction in speed during the operation. The fuel pumps are so powerful that fuel can be delivered to an aircraft carrier and a cruiser simultaneously.

As reported in the mentioned magazines, a cargo ship is being designed for the US Navy solely for the supplying of combatant vessels with missiles. These ships are being reequipped from the ammunition ships types AE-21 and AE-23. Like the AOE-1, they are to be equipped with high speed automatic transloading shuttle systems.

A special program is being put into action to reequip the tankers in order to increase their capability for fueling the Navy strike groups. In particular, it anticipates an increase in their capacity by 1.5 times. All of the fuel pumps and winches will draw their power from the auxiliary instead of the main engine plants. Thus it will not be necessary to reduce speed during refueling operations.

A number of other vessels are also being reequipped. Thus, one of the landing ships has been reconverted into a minesweeper tender (an "anti-mine support ship" according to American terminology - (Note: probably Mine Warfare Command and Support Ship)). This vessel is capable of carrying, launching, and servicing 20 minesweeping boats. In addition it may also serve as a floating base for fleet and coastal minesweepers and may be used as a command ship for a minesweeping sovedinoniyev.

Assault helicopter aircraft carriers have also been provided the US Navy for the support of amphibious operations. These ships transport troops and armament. Landing operations are conducted by helicopters. One such ship can carry 2000 troops not counting the complement of 600 men. It carries 20 CH-370 transport helicopters or 30 HH-34D light helicopters. Other ships are designed for transporting wheeled and tracked equipment.

According to the American press, the US Navy is devoting considerable attention to the construction and reconversion of submarine tenders. The primary mission of the new tenders is that of supporting the atomic submarines armed with "Polaris" missiles. It is felt that such tenders can provide routine and third echelon maintenance for submarines, as well as assembly, adjustment, and certain forms of missile maintenance. It is anticipated that each tender will service a sovedinoniyev or nine submarines. One such ship will have a displacement of 21,450 tons, a length of 195.8 meters, and will carry a crew of 1,387.

A number of submarine tenders are being reconverted. The purpose of the reconversion is the same -- to provide the supply and maintenance

of atomic submarines armed with "Polaris" missiles. In this modernization, the after gun battery is removed and an additional deck house is built on the upper deck containing new devices and equipment for the servicing of atomic submarines. Among them are items used for the deactivation of equipment and sanitary processing of personnel, installations for the manufacture and storage of liquid oxygen, electric and electronic calibration laboratories, etc. The cost of reconverting the tender is \$4,400,000.

Destroyer tenders are also being modernized by a special program. The after gun batteries are being removed and replaced with additional deck houses and special equipment. For example, workshops for the assembly of antisubmarine warfare helicopters and the repair of fire control equipment are located in the after deck house. A hangar for the assembled helicopters is situated on the upper deck. The lifting capacity and extension of the cargo crane booms will be increased. Equipment will be installed for the assembly and storage of torpedo-rockets. The reconversion cost for one ship is 5.4 million dollars.

More and more attention has been given in recent years to vessels researching in the field of long distance radio communications and the launching of artificial satellites, and for the tracking of missiles and artificial satellites.

The broad program of construction and modernization of the auxiliary fleet ships of the US Navy, and the nature of the missions, attests to the thorough preparation of the US Naval Forces for an aggressive war.

## IN VICTORY'S NAME

Col. V. Kondrashev

The End /The End, Nauka publishing house, Moscow, 1966, cost: 1 rouble 66 kopeks/ is the title of an historical memoir on the defeat of imperialist Japan in 1945 published under the editorship of Marshal of the Soviet Union R. Ya. Malinovskiy. This book has all of the attributes to take its deserved place among the best publications of historical-memoire literature.

The sketch summarizes materials of extreme historical value, it gives a deep analysis of the political situation and the military events during the concluding stage of World War II, it exposes factors which brought the decisive victory to our Armed Forces, clearly portrays the mass heroism of the Soviet fighters, from soldier to marshal who with honor and glory fulfilled their sacred duty to the Homeland.

The book gives in detail the basic traits and features of the offensive operations in Manchuria, and the Yuzhno-Sakhalinsk offensive and Kurile amphibious operations.

... The sounds of war stilled in the west. The Soviet people had gained their world-historical victory over fascist Germany and its vassals. Now it would seem that steps could be taken to healing the wounds of war and peacefully begin to build a new life. However, the nucleus of war still remained in the Far East.

It was 8 August 1945. The heat was unbearable in the Transbaykal and in Mongolia. There were heavy downpours along the Amur and in the Primor'ye. But nothing could hold back the unstoppable surge of the troops.

On the night of 9 August, the troops of the Transbaykal and the 1st and 2nd Far East fronts and the forces of the Pacific Fleet and the Red Banner Amur flotilla carrying out their allied mission and despite the unfavorable meteorological, climatic, and geographic conditions, shifted over to a decisive offensive and attacked the Kwangtung Army on land, from the air, and from the sea from the borders of Manchuria to the coast of Northern Korea.

The operations of the tank and rifle divisions were rapid and active. The crossing of the burning and waterless steppes, the desert spaces and granite ridge of the Bol'shoy Khingan was truly a remarkable and unforgettable march of the troops of the Transbaykal front.

The troops of the 1st Far Eastern front, in the hard to cross mountain-taiga terrain and in the face of fierce enemy resistance, broke through the fortified regions and routed the samurais on the Khingan-Lukden axis. Neither the UR (fortified regions), readied for tens of years, the mountain ridges of Eastern Manchuria, nor the detachments of condemned prisoners and diversionists could hold back the offensive of the glorious Soviet troops. The 2nd Far Eastern front also advanced successfully along the Sungara River. Crossing the Amur and Ussuri rivers, the troops of this front persistently pursued the enemy retreating into the depths of Manchuria.

Subsequently, step by step the authors describe the events of those remarkable days. Amphibious and airborne landings. The operation of the air force, artillery, cavalry. Battles at sea. The capture of major cities, the Kurile Islands, Yuzhny Sakhalin. The mass surrender of the Japanese occupiers. The liberation of the peoples of China and Korea. Greeting the Soviet liberators as the dearest and desired guests. And, finally, the liberation of American, English, and French prisoners

or war. Such were the stages of the great route, these were the events filled with bravery and heroism.

And now, victory. Very little time was required to bring the Japanese militarists to unconditional capitulation.

The Far Eastern campaign can truly be called a lightning one. It lasted only 24 days. The Soviet Armed Forces fully routed the million-strong Kwangtung Army, the marionette armies of Manchukuo and Inner Mongolia, the Suyyuan army group, half of the troops of the 5th Front and the Sungari river flotilla. One cannot but agree with the authors' conclusions that "...world history never heard of such a rapid destruction of such a great army within a few days after the initiation of combat operations."

This is not the only thing that characterizes the results of the Far Eastern campaign of the Soviet Armed Forces. It is unbrokenly bound with the liberation of the people of China, the final victory of the Chinese revolution which, unfortunately, the Chinese leaders have forgotten. The defeat of the Kwangtung Army also ensured the full freedom of the Korean people. The historical events of those days had their influence on the rise of the national-liberation struggle in Indonesia, Burma, Malaya, in the Philippines and in India.

How was it possible, only three months after the defeat of fascist Germany, in the heavy postwar conditions, thoroughly prepare, plan, and support the operations of major troop groups and forces situated 10,000 kilometers and more from the basic regions of the country? What caused this truly lightning strike?

First of all it was the strength of the socialist social order, the wise leadership of the party, the might of the Soviet Armed Forces outfitted with first class military equipment and having the combat experience that no other army in the world had, and the faith of the Soviet fighters, the fighter-liberators, in the truth of victory. These and other factors are clearly and understandingly portrayed in the book.

We will hold the reader's attention on one of them -- the role of the rear, without which such a brilliant victory could not have been. It is appropriate to mention here that The End is probably the first military historical work which very fully shows the fruitful and selfless work of the rear troops. An entire chapter is devoted to them. We, the rear workers, learn of this with great gratitude to the authors.

The book describes how and in what scale the rear of the center and of all the fronts was able, in such a short time, to carry out its tasks and thereby expedite victory in the war. Within a short period of time of readying the Far Eastern campaign, the central agencies were able to concentrate a more than half million man army in the Far East with combat equipment and materiel. The regrouping over a 10-12 thousand kilometer distance placed a great stress on railroad transportation. Nevertheless, in preparing for the war, nearly 136,000 railroad cars with troops and freight were moved from the west to the Far East and the Transbaykal. The tempo of troop transportation was so high that quite frequently trains followed within sight of each other. In addition to the shipments from the west, delivery was also executed along the waterways and railroads of the Far East. It was particularly difficult to provide support, particularly with fuel, to the mass intrafront troop regroupings which they accomplished under their own power. But the rear successfully coped even with this task.

The authors also clearly showed the difficulties which existed in the rear work of the fronts and how they were overcome during preparation and in the course of the operations. Modern troop support with

everything necessary for combat and life was a very responsible task. Its solution occupied the commanding officers, commanders, and combined-arms staffs. "Everyone understood," recall the authors, "that the success of the offensive as a whole depended upon supporting the troops with all requirements during the operation -- the accumulation of material and technical means in time, the timely building of roads and bridges in sufficient quantity, the efficiency of the supply organization, the availability of water and firewood, the nourishment of the troops.

"This is why the field lanterns remained lit 'till nearly dawn in the headquarters of the fronts, armies, and soyedineniya. Here, away from operational problems for a few moments, the commanding officers of the fronts and armies, the soyedineniya commanders, and their chiefs of staffs together with the chiefs of services occupied themselves with the problems of material and technical support."

Considerable attention was given to water supply. The front commands, especially the Transbaykal front, considered that the question of water was its number one problem and therefore took the necessary measures. It suffices to say that in the Transbaykal front alone, during the period from 10 July to 8 August, from 13 to 120 water supply points were constructed for every 30 kilometers along the major routes of troop movement which made it possible to pass from one to three divisions along each route with their reinforcing chasti. The book gives a detailed description of water supply organization in the waterless regions.

The authors, with considerable warmth, mention the rear workers who were able to create favorable conditions for the successful conduct of operations. "...It is difficult to describe," they write, "how difficult it was to carry out the great task levied upon the rear agencies for the material and technical support of the troops in the forthcoming war against imperialist Japan.

"The recollections of the direct participants in the operation and the archive documents, yellowed from time, permit us to restore the great picture of the creative and intensive efforts of many thousands of persons who gave no consideration to time or the great difficulties connected with the severe climatic and geographic conditions in the fulfillment of their tasks within the prescribed time and in so doing brought closer the hour of victory."

There is no exaggeration here. The Soviet rear warriors fully earned this high evaluation. The book subsequently describes the combat operations of the railroad, highway, and motor vehicle troops, the fuel supply, food and clothing supply, medical, and veterinary services.

The authors draw a parallel between the state of the economy of the Far East during the period of the Russo-Japanese War of 1904-05 and our time. We know how backward Siberia and the Far East were in the past. Everything had to be brought in from Central Russia to support the war of 1904-05. During the years of Soviet rule they were converted into major industrial, agricultural, and cultural centers of the land. In the Far East much was built in the way of lines of communications. Even during the Great Patriotic War the development of the national economy of the Far East did not cease. Even before the war against fascist Germany was over the Party's Central Committee accepted a broadened resolution for a further increase in the economy and culture of the Far East. The workers tried to do everything possible to strengthen the defensive capability of the Far Eastern kray even more. This made it possible in 1945 to make wide use of the material and technical base for supporting the operating fronts.

The successes in the work of the rear at that time are explained by more than the heroic efforts of the personnel of rear echelon and installations at all levels. The leadership of troop rear support was also well organized. Outstanding leaders of the central apparatus of the rear, headed by the Deputy Chief of Rear of the Soviet Army Col. Gen. V. I. Vinogradov, were sent out to the Far East within an operational group. This group was authorized to make local decisions on all questions of troop support by subordinate services. It played a leading role in organizing the uninterrupted rear support of the Far Eastern campaign.

The reader will find data in the book on the scale of the deployed groupings of rear echelon and installations, as well as fundamental quantitative indices of work fulfilled by the rear services.

The authors clearly portrayed the features of rear organization under conditions of the Far East. Actually, if during the past war the Western theater of military operations fronts had deep rear areas whose territory with its developed lines of communications was used in the interests of the given front, then the rear areas of the 1st and 2nd Far Eastern fronts were established primarily along the Transsiberian railroad at a distance of 25-150 kilometers from the troops, that is, within the limits of the regimental-divisional and army rear areas. At the same time, the rear area of the Transbaykal front was built to a depth of from 100 to 600 kilometers. This is explained by the great distance of troop operations areas from the railroads at whose main stations were located the predominant concentration of rear echelon and installations of the front.

The authors correctly indicate that the decisive influence on the organization of the rear was played by the lines of communications -- railroads and highways, their tracing and condition. For instance, the railroads were given such significance that special operations were planned beforehand to prevent their destruction by the enemy or their capture in an operable state.

The authors also correctly emphasize the decisive role of highways. This is understandable. The war with Hitlerite Germany showed that in a number of offensive operations the rapid movement of the troops and the successful pursuit of the enemy, when the restoration of railroads lagged seriously, was wholly dependent upon motor vehicle transport as the sole means of delivery. In the conditions of the Far East, however, these conditions took on an even stronger impact. The selfless labor of the highway personnel, drivers, and repairmen ensured the uninterrupted delivery of everything necessary for the troops. During June and July of 1945, the motor transport of the three fronts carried more than half a million tons of freight.

But how much stubbornness, persistence, and strength of will the rear personnel had to have to provide thorough support to the movement of a one hundred thousand mass of trucks and a great number of prime movers and tractors which had to be fuelled, serviced, and repaired.

But the motor transport was not always able to cope with delivery. We can convince ourselves of this with the following example given in the book. During a rapid offensive, the tank army of the Transbaykal Front found itself at a distance of 450 kilometers from its primary supply bases. Fuel and water was lacking. In the 9th Mechanized Corps, two-thirds of the tanks, all of the self-propelled mounts, and many of the vehicles were without fuel. Together with the 5th Guards Tank Corps, it was forced to conduct combat with composite detachments for whom fuel was obtained from all individual vehicles. The 36th Motorized Rifle Division of the 7th Mechanized Corps was removed to the second echelon. It seemed catastrophic. No fuel, and the army and front motor transports, carrying fuel, were bogged down in the sand dunes en route to the pass.



A way out was found, however -- at a rapid tempo, two specially detailed air transport divisions through rain and fog, with an absence of landing fields in the mountains, delivered the required amount of fuel, ammunition, and water in two days. The army continued its advance without pause. This example attests to the great role of air transportation which, under certain conditions, can become the only means of delivery.

It was not easy for the medical service specialists. One cannot but agree with the authors that "a whole book could be written on the great role which was done by the medical workers during the preparatory period and then during the operation itself... They honorably carried out their task in the prevention of sickness and in the evacuation and treatment of wounded." The features of the theater created great difficulties in the medical support of the troops. Typhus and dysentery was widespread among the local population and there were cases of small pox, plague, and cholera. Sanitary and preventative and antiepidemic measures had to be taken on a large scale.

The Far East campaign provides us with positive experience in the broad use of air transport for the evacuation of sick and wounded over extended lines of communications. For instance, in the Transbaykal front nearly 50% of all of the sick and wounded were air evacuated from the divisional and army hospitals to the hospital complex of the front.

The book gives a high rating to the work of the veterinary personnel. This is not accidental. There were many horses with the troops in the Far East, while the epizootic conditions of the areas of combat operations were very unfavorable (infectious anemia of horses, strangles, plague, hoof and mouth disease, anthrax, and others).

The authors clearly show the work of the rear of the Pacific Fleet and the Amur Flotilla. The initiative, resourcefulness, and inventiveness of the fleet rear personnel helped them to overcome difficulties which came up and successfully coped with their tasks at sea and ashore. The fleet also gave great assistance to the ground troops not only through combat operations but through the movement of personnel, equipment, and materiel supplies.

A great debt in the uninterrupted rear support of the troops belongs to the political organs, the party and komsomol organizations who were able to mobilize the rear personnel for the successful execution of their assigned tasks.

What conclusions can we, the rear workers, draw from reading this interesting book? The Far East campaign once again showed that the rear is one of the decisive factors ensuring victory in war. Under modern conditions this significantly raises the demands on its personnel, especially in solving the problems of combat readiness. Only a thorough preparation of the Soviet Army rear permitted it in 1945 to fully support the lightning-like strategic operation to such a great depth.

We will mention in conclusion that the book has a military and a political and scientific-educational interest. It is written intelligibly, in a popular style, and is well illustrated. Undoubtedly the wide military society will greet with satisfaction this wonderful sketch of the battles and actions of one of the greatest battles in history.



## CHRONICLE O. THE REAR

The Minister of Defense USSR has commended a large group of servicemen and employees of the Soviet army for their active participation in free blood donations. The best in the organization of free blood donations are the Baltic, Far East, Moscow, Belorussian, and Turkmen Military Districts, the Group of Soviet Forces in Germany, and the Southern Group of Forces. Among those to whom the minister expressed appreciation and awarded valuable personal gifts were Senior Lieutenant Medical Service V. Kichuk, medical workers V. Baranovskaya, G. Dudnik, A. Zemlyanaya, L. Zaborskaya, N. Kopeykina and others. Generals and officers of the medical service were also commended for their initiative in organizing.

\*     \*     \*

The State Committee of the Council of Ministers USSR on labor and wages, jointly with the Presidium VTSSPS (All Union Central Council of Trade Unions) issued a clarification "On Holiday Work Compensation."

All of the regulations contained in the clarification will also include the workers and employees of the Soviet Army and Navy.

\*     \*     \*

The Deputy Minister of Defense USSR for construction and troop billeting has approved the non-reducible norms of the operating reserve stock of materials and equipment for communal installations of military posts of the Ministry of Defense. The norms plan for a non-reducible reserve to support an uninterrupted and dependable operation of electric facilities and heat and sanitary engineering facilities under the jurisdiction of the billeting agencies of the Ministry of Defense.

\*     \*     \*

Regulations on electric network areas of the billeting service of the Soviet Army and Navy has been put into effect. It sets forth the general regulations and data on the organizational structure of the electric network areas (RES -- Rayon Elektricheskoy Seti), their basic missions, information on their technical and other means, and the rights and duties of the RES Chief.

In the very near future, the regulations will be sent to the military districts and the central directorates of the Minister of Defense.

\*     \*     \*

The Billeting Administration of the Ministry of Defense has planned to begin in 1967 the series production of AS-MZ-66 automatic stations for the control of the pumping stations which raise the water pressure in the inside water systems of barracks, living quarters and other buildings. The pump unit may consist of one or several centrifugal pumps connected in parallel.

Automation ensures the automatic starting and stopping of the pump unit according to the given parameters and the switching on of the standby unit should the working unit become inoperative. Furthermore, if the electric motor becomes overloaded as a result of a short circuit or of a phase fall-out the pump unit also is automatically stopped.

\*     \*     \*

The Main Trade Directorate of the Ministry of Defense has published Information Bulletin No. 4 on the exchange of leading know-how in trade

work. It gives the preliminary work totals in the planning and evaluation of administrative activity on two indices: by commodity turnover and income.

Now, twelve military exchanges and three major enterprises are working this way. They have been authorized, in accordance with the approved commodity turnover plan, to make individual determination of the structure of commodity turnover, the income from trade discounts, the wage fund, number of employees and others, based on the economic feasibility, the need for improving trade and welfare support of military contingents, and the fulfillment of prescribed tasks in budget payments and capital investments.

The bulletin reports that under the new work conditions, there has been an improvement in the finance and administrative activity of the post exchanges and enterprises, their profitability has increased and their economic accounting strengthened.

The bulletin also describes the preparatory work of the Odessa and Ural Military District post exchange in concluding agreements with the purveyors for the delivery of goods to the post exchanges; on the experience of one of the post exchanges of the North Caucasus Military District for raising the level of taxes realized through an improved structure of retail goods turnover; on proper maintenance of refrigeration equipment in a post exchange of the Transcaucasus Military District headed by Comrade V. Pribyl'skiy; indicates the operating results of a new store recently opened in the Red Banner Pacific Fleet for the sale of hunting, fishing and sporting goods.

\*     \*     \*

The Council of the Military Scientific Society of the Central Directorate of Military Transportation held two meetings of society members. Reports were heard from Col. K. Podushko and Lt. Col. V. Moskin on the experience of laying a railroad floating bridge, and from Col. A. Nikulin on the provision of bridge construction for the restoration of highway bridges. The report by Col. L. Ryazantsev on "Fifty Years of Military Transportation" evoked considerable interest.

Bulletins will be periodically issued by the VNO council as an aid to the members of the Military Scientific Society.

\*     \*     \*

The motor transportation service of the TSUPVOSO ( Central Directorate of Military Transportation ) has developed an aid on military motor vehicle transporting for the training classes in the motor vehicle podrazdeleniya. It indicates that the classroom set includes subject boards, mock-ups of transportation means, freight, and multi-use containers. These aids are also being sent to the troops.

\*     \*     \*

The TSUPVOSO recently reviewed a training film, produced by the Ministry of Defense film studio for the highway troops entitled "Medium Sectional Highway Bridge (SARM - sredniy avtodorozhny razbornyy most). The film demonstrated its structural features, system of readying the crossing area for bridge erection, placement of supports, assembly and laying of the spans, and load testing the bridge.

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The TSUPVOSO has published two new posters: "Vehicle Unloading by the Tilted Method" and "Placement and Securing of Four-axle Vehicles on Railroad Flat Cars" which will soon be delivered to the troops.

An economic council has been established in one of the chast'i of the Air Defense troops and it is working well. The council recently reported to the Command on the state of economic activity with the podrazdeleniya, on the struggle by the troops for thriftiness and economy, and noted measures for further improvement in economic work.

A "Guide on the Organization and Conduct of Company (Battery) Administration" has been developed by the Belorussian Military District and distributed to the troops.

It sets forth the basic regulations on the organization and conduct of company administration, the system for providing soldiers and sergeants with clothing items, supply norms, the rules on wearing the uniform and accessories, the maintenance of uniforms and footwear, the system for marking articles of clothing, the bath and laundry support system, the accounting for articles in the podrazdeleniye, and personal hygiene rules. The guide is illustrated with drawings and photographs.

The food supply section of the Belorussian Military District has developed a set of model non-mechanical equipment. The set was prepared in the mechanical unit repair shop of the food supply service. It includes: rack for storing bread, cupboard for storing butter and sugar, racks for the drying and storing of kitchen and dining room dishware and utensils, tables on which to slice bread, final cleaning of potatoes, garbage collection, sorting of cereals, movable work table, racks for hanging meat, carrying trays for meat and fish, combination cart for washing cups and gathering dishware, two-sectional basin for washing dishware, cart and container for the delivery of products, and a starch and residue collector..

Models of this equipment underwent tests in several chast'i and positive comments were made about them.

The district's military council approved the initiative of the food supply section and suggested that during 1967-1968, all of the troop kitchens and dining rooms should be provided with unimodel non-mechanized equipment. For this goal the district's food supply section has published and disseminated "Recommendations on Equipping Kitchens and Dining Rooms with Non-mechanical Equipment". These recommendations provide a short description, preparation order, operating rules, and sketches and drawings of the entire set of equipment.

At the beginning of the training year, a chast'i of the Moscow Military District was provided with a model rear training classroom. Studies will be conducted here on rear-tactical and special training of soldiers, sergeants, and officers from all rear services. The personnel of the combat podrazdeleniya can receive qualified consultation in this class on questions of rear support.

A chast'i of the Kiev Military District has held a military-scientific theoretical rear conference. Topics discussed concerned raising the combat readiness of rear podrazdeleniya. In their reports the rear services officers shared their work experience, introduced suggestions on the order of rear podrazdeleniya personnel, methods for the planning of loading and movement of materiel in compressed time frames, on the utilization of the simplest mechanization devices for loading and unloading operations, and others.

## THE WORK OF THE EXCHANGES IMPROVES

In a letter sent to the editors of our magazine, Capt. P. Yeshchenko stated that exchange No 4, which is situated in his chast', did not operate well. Commodities were brought in infrequently and there was a frequent lack of articles of daily need. The Trade Directorate of the Turkestan Military District did not react strongly to the complaints of the purchasers.

The editors directed this letter to the Main Trade Directorate of the Ministry of Defense. The Deputy Chief of the Main Trade Directorate, Colonel V. Bondarenko, informed us that a commission together with the deputy chief of post exchanges for political matters inspected the work of the exchange and ascertained that there were disruptions in trade.

Now, the management of the post exchange and the command element of the chast' are devoting more attention to the work of the store. The necessary commodities are delivered on time. Measures are being taken to improve the work of the public control commission.

## TABLE OF CONTENTS

The Anniversary Year, . . . . .	2
Rear Development in the Postwar Period, . . . . .	7
The First Years of the Military Academy, . . . . .	15
The Friendship of Peoples Is The Guarantee of the Might of the Homeland, . . . . .	19
The Memory of the Heroes Is In Our Hearts, . . . . .	24
Concern For Discipline Is Concern For Combat Readiness, . . . . .	26
Study Always And Everywhere, . . . . .	31
Enthusiasts, . . . . .	35
Training Assembly On The Pretraining of Young Drivers, . . . . .	36
The Grandeur of the Call, . . . . .	39
Master of Good Spirits, . . . . .	46
The Five-Year Plan of the Military Sovkhozes, . . . . .	49
For The Soldier's Table, . . . . .	54
Organizing the Messing of Rocketeers, . . . . .	55
Training of Military Cooks, . . . . .	58
An Important Stimulant For New Achievements, . . . . .	60
Honored Physician of the Republic, . . . . .	64
With Commodities For A Distant Garrison, . . . . .	66
Time Dictates, . . . . .	68
Life Demands, . . . . .	70
Trade Workers Conference, . . . . .	72
Vegetable Warehouse With Active Ventilation, . . . . .	73
Traffic Control By The Method of Escorting Columns, . . . . .	77
Morning Inspection, . . . . .	79
You Are Answered, . . . . .	81
Study And Expand The Theory of Military Economics, . . . . .	82
Economic Accounting, . . . . .	87
Distant Runs, . . . . .	90
Place Movement Control System on a Scientific Basis, . . . . .	94
Do Not Permit Freight Car Idle Time, . . . . .	96
Loading Echelons With Heavy Equipment at Small Stations, . . . . .	100
The Inclined Method of Loading Vehicles Aboard Ships, . . . . .	102
Protection Against Corrosion, . . . . .	103
Repairing Food Supply Service Equipment, . . . . .	107
Field Maintenance of Motor Vehicles, . . . . .	110
They Defended Their Theses, . . . . .	113

8/10 1.

J-1846 130

How to Eliminate Breaks in the Windings of the MPV-11.7/8A Oscillator-Armature, . . . . .	114
Repair of Heater-Boilers, . . . . .	115
Sinking Metal Piles With A Light Diesel-Hammer, . . . . .	116
Ships of the <u>US</u> Navy Auxiliary Fleet, . . . . .	117
In Victory's Name, . . . . .	120
Chronicle of the Rear, . . . . .	125
The Work of the Exchange Improves, . . . . .	128

71

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